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Water Resources Data for New York, Water Year 1982. Volume 1. Eastern New York Excluding Long Island

(U.S.) Geological Survey, Albany, NY

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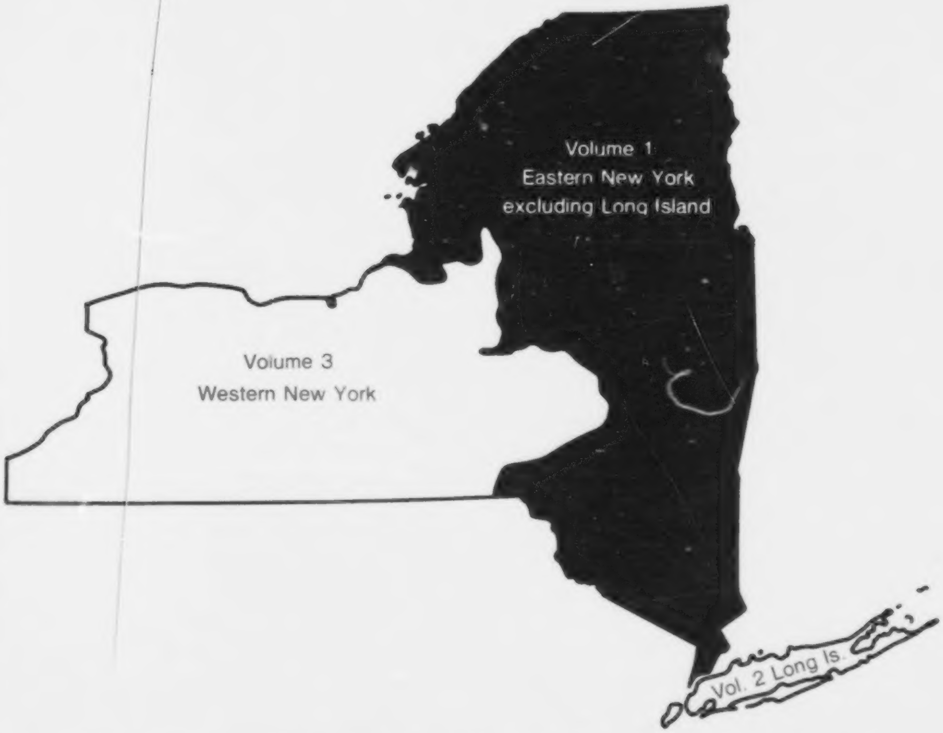
Volume 1. Eastern New York excluding Long Island



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-82-1
Prepared in cooperation with the State of New York
and with other agencies

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U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

CALENDAR FOR WATER YEAR 1982

1981

OCTOBER

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26	27	28	29	30		

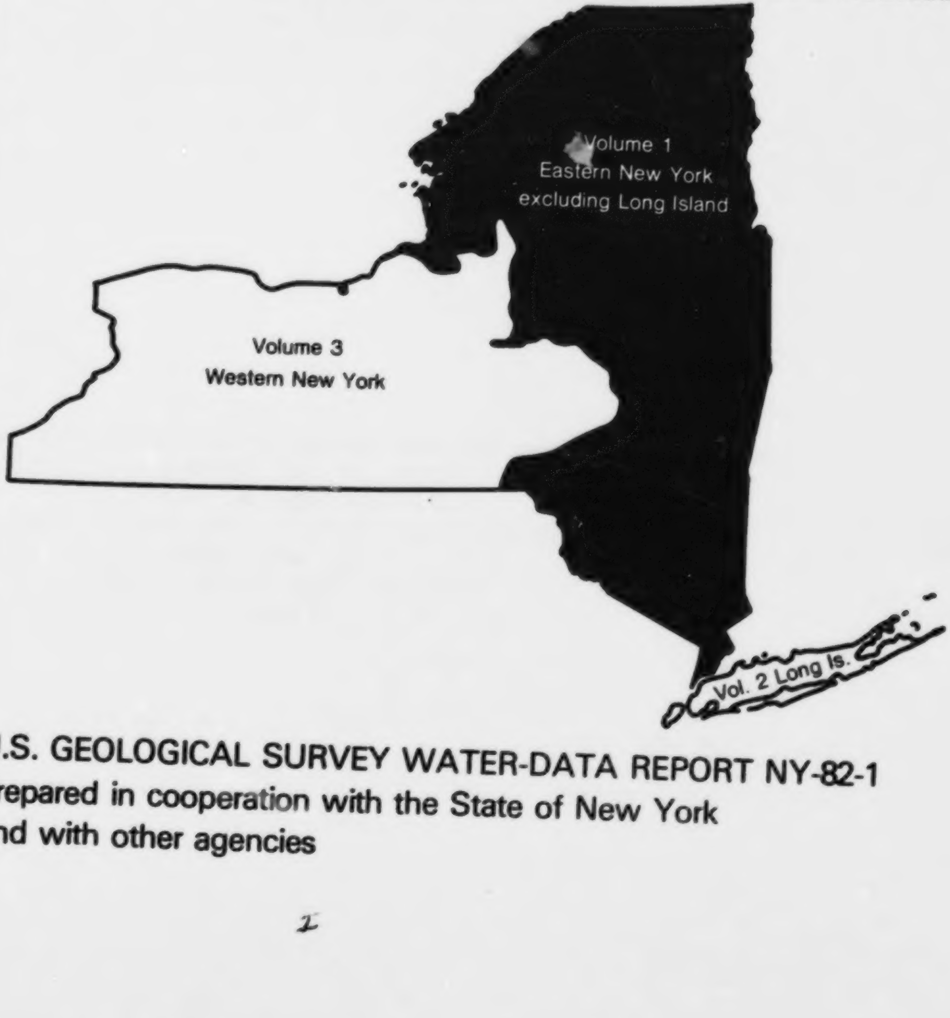
U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

Water Resources Data New York

Water Year 1982

Volume 1. Eastern New York excluding Long Island

by T.J. Zembrzuski, Jr., P.M. Burke, R.J. Archer, and J.A. Robideau



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NY-82-1
Prepared in cooperation with the State of New York
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

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GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in New York write to
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P.O. Box 1350
Albany, New York 12201
1983

PREFACE

This volume of the annual hydrologic data report of New York is one of a series of annual reports that document hydrologic data gathered from the U. S. Geological Survey's surface- and ground-water datacollection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for New York are contained in three volumes:

Volume 1. Eastern New York excluding Long Island
Volume 2. Long Island
Volume 3. Western New York

In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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Water resources data for the 1982 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels of ground-water wells. This volume contains records for water discharge at 99 gaging stations; stage only at 5 gaging stations; and stage and contents at 4 gaging stations, and 19 other lakes and reservoirs; water quality at 25 gaging stations, 5 precipitation stations and water levels at 23 observation wells. Locations of these sites are shown on figures 4A and 4B. Also included are data for 51 crest-stage and 9 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

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WATER RESOURCES DATA FOR NEW YORK, 1982
Volume 1.--Eastern New York excluding Long Island

INTRODUCTION

Water resources data for the 1982 water year for New York consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; quality of precipitation; and water levels of ground-water wells. This volume contains records for water discharge at 99 gaging stations; stage only at 5 gaging stations; and stage and contents at 4 gaging stations, and 19 other lakes and reservoirs, water quality at 25 gaging stations, 5 precipitation stations and water levels at 23 observation wells. Locations of these sites are shown on figures 4A and 4B. Also included are data for 51 crest-stage and 9 low-flow partial-record stations. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data together with the data in Volumes 2 and 3 represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State, local, and Federal agencies in New York.

Records of discharge and stage of streams, and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released in separate reports.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NY-82-1." These water-data reports are for sale, in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (518) 472-3107.

COOPERATION

The U.S. Geological Survey and organizations of the State of New York and other agencies have had cooperative agreements for the systematic collection of water records since 1900. Organizations that assisted in collecting data included in Volume 1, water year 1982, through cooperative agreement with the Survey are:

New York State Department of Environmental Conservation
New York State Department of Transportation
County of Ulster, County Legislature
County of Westchester, Department of Public Works
City of Albany, Department of Water and Water Supply
City of New York, Bureau of Water Resources Development
City of New York, Department of Environmental Protection
Village of Nyack
Board of Hudson River-Black River Regulating District
Oswegatchie River-Cranberry Reservoir Commission
Power Authority of the State of New York

Assistance in the form of funds for collecting records at gaging stations published in this report was also given by the U.S. Army Corps of Engineers, the Environmental Protection Agency, and the St. Lawrence Seaway Development Corp.

The following municipalities and organizations aided in collecting records:

Mamaroneck, Plattsburgh, Rome, Rye, Tarrytown, Lake George and Yonkers; Central Hudson Gas and Electric Corp.; Indian River Co.; New York State Electric and Gas Corp.; Niagara Mohawk Power Corp.; Orange and Rockland Utilities, Inc.; Power Authority of the State of New York; and Spring Valley Water Co.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

The sharp contrasts among regional streamflow patterns that emerged in eastern New York during the 1981 water year decreased somewhat in 1982. The annual mean discharge of streams in southeastern New York continued to be below average, whereas that in northeastern New York remained generally above average; however, the near-record extremes in annual discharge that occurred last year did not recur in either region.

Although annual flows were close to normal, some monthly streamflows departed considerably from normal in response to extended wet periods interspersed with prolonged periods of below-normal rainfall.

October flows were above normal in all but the southeastern part of the State. Heavy rains in the Mohawk Valley on October 27-28 caused flooding of several streams, and the peak flow of Otsquago Creek at Ft. Plain, a gaged tributary of the Mohawk River, was the highest in the 33 years of record.

November and December were deficient in precipitation, and discharge of most streams declined, contrary to the normal seasonal trend. Runoff was deficient in many stream basins in the southeast and western Adirondack region during this time.

In northern New York, a colder than normal January and a lack of precipitation through February kept monthly streamflow below average. The opposite condition occurred in the south, where warm weather and heavy rain at the beginning of both months resulted in above-average monthly flows.

Streamflow across eastern New York returned to normal in March. The spring breakup began in mid-March with warmer-than-average weather that lasted into April.

Record-breaking floods occurred on April 18 on streams draining the Tug Hill Plateau and western Adirondack Mountains in northern New York. Snow surveys made a week before the flood indicated the water equivalent of the snowpack to be as much as 9 inches in some areas. Temperatures rose above 60°F on a few days preceding the flood, which accelerated snowmelt and caused streams to begin rising. Rain on the evening of April 17 averaged only 1 to 1.5 inches over the area, but was sufficient to trigger severe flooding. The greatest flooding was on streams in the headwaters of the Black River basin, where new record peaks occurred at the long-term gaging stations on the Black River near Boonville and the Independence River at Donnatsburg. Although no loss of life or devastating property damage were reported in any of the small communities in the basin, several roads were closed, some highway damage occurred, and many farms on the flood plain of the Black River were flooded.

Streamflow in May receded faster than normal as a result of little rain during the month. Several basins in the eastern part of the State had deficient runoff. In June, an abundance of rain reversed the seasonal drying trend and resulted in generally above-normal monthly flows. Near-record high June flows occurred in many streams in the southeast.

Despite generally below average precipitation in July, monthly flows sustained by June's rains remained near average. In August and September, weather patterns similar to those of the summer of 1981 brought generally above average streamflow to northern areas and below average streamflow to the southeast.

Storage in major reservoirs in northern New York remained near or above average during most of the year. In southeastern New York, however, the drought emergency declared in January 1981 for the New York City reservoir system continued until the rains in late April 1982 brought the combined storage of the system to 100 percent capacity. Storage remained at near normal seasonal levels for the rest of the year.

Water-quality data from the eight NASQAN stations and the Hydrologic Benchmark station in eastern upstate New York indicated a few new extremes for these stations' period of record, but the extremes were not significantly different from their normal range.

Ground-water levels in eastern New York generally ranged from below average to average throughout much of the 1982 water year, continuing the trend from the 1981 water year. Ground-water levels were above average only near the central eastern border and the extreme northern part of New York. In November, the shallow water-table aquifer in the Albany area was extremely low--at about the 1965 level at the end of the early 1960's drought. In January, heavy precipitation in southeastern New York recharged aquifers and raised water levels to average or above-average. In April, rainfall and snowmelt combined to raise ground-water levels in the northern areas to average levels or higher. By September, however, water levels at all observation wells were undergoing their seasonal decline.

Despite the generally low water-level conditions, at least two areas in eastern New York recorded the highest water levels in the last 14-17 years. Wells Du-1009 in Dutchess County and W-533 in Washington County recorded the water-table rise in valley flat areas due to excessive spring recharge.

In general, year end aquifer conditions were not back to normal but had reversed their below normal trends of the last couple years.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound system units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as the organisms which produce colonies within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brainheart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material See Bottom material.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material".

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium, for example water, that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table (it can also be above ground level). Formerly called artesian aquifer.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45-micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

Where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontribution areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

High tide is the maximum tidal peak reached each day.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps, each hydrologic unit is identified by an 8-digit number.

Low tide is the minimum tidal trough reached each day.

Mean high or low tide is the average of all high or low tides, respectively, over a specific period.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organic carbon (OC) is a measure of the organic matter present in aqueous solution and (or) suspension. May be reported in any of three categories (DOC, dissolved organic carbon; SOC, suspended organic carbon; TOC, total organic carbon).

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle-size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology.

The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. The sample is subjected to mechanical and chemical dispersion in distilled water before analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass or volume.

Periphyton is the assemblage of algae, fungi, and bacteria which are attached to or live upon submerged objects in lakes and rivers.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Picocurie (PCI, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells/mL of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are free-swimming unicells characterized by a red spot.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells/mL of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Polychlorinated napthalenes (PCNs) are industrial chemicals that are mixtures of chlorinated napthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg $C/(m^2.time)$ for periphyton and macrophytes and mg $C/(m^3.time)$] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg $O_2/(m^2.time)$ for periphyton and macrophytes and mg $O_2/(m^3.time)$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge times mg/L times 0.0027.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lived.

Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multi-plate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is that part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of the total concentration in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, *Hexagenia limbata* is the following:

Kingdom................Animal
Phylum.............Arthropoda
Class.................Insecta
Order...........Ephemeroptera
Family............Ephemeridae
Genus.............. *Hexageria*
Species......*Hexagenia limbata*

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of substance in solution or suspension that passes a stream section during a 24-hour day.

Total load (tons) is the total quantity of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the mg/L of the constituent, times the factor 0.0027, times the number of days.

Total (as used in tables of chemical analyses):

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Water table is the surface of a ground-water body at which the water is at atmospheric pressure. It is defined by the levels at which water stands in wells that penetrate the water body just far enough to hold standing water.

Water-table aquifer is an unconfined aquifer whose upper boundary is the water table.

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is used as an abbreviation for "Water Resources Data" in the REVISED RECORDS paragraph to refer to State annual basic-data reports published before 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station, partial-record station, and miscellaneous site has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations, miscellaneous sites, and other stations; therefore, the station number for a partial-record station or a miscellaneous site indicates downstream-order position in a list made up of all types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 01300500 includes the 2-digit part number "01" plus the 6-digit downstream order number "300500". In a few instances where no gaps were left in the 8-digit numbering sequence, one or two digits were added (making a 9- or 10-digit station number) and (or) a latitude-longitude number was used for identification.

NUMBERING SYSTEM FOR WELLS

The 8-digit downstream order station numbers are not assigned to wells. The well-numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells within a 1-second grid. See figure 1 below.

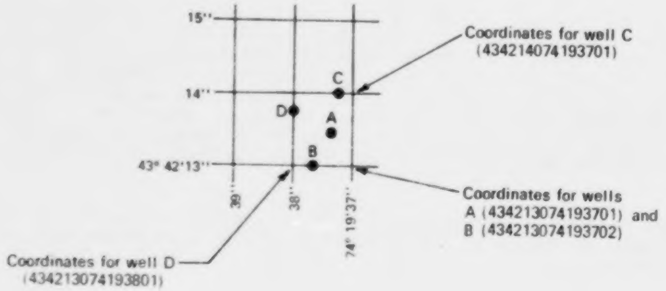


Figure 1. System for numbering wells (latitude and longitude)

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated into the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consulation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality.

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrographers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrographers, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in the section, "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with "EXTREMES FOR THE CURRENT YEAR", if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time, for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of Field Data and Computed Results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good," within 10 percent; and "fair," within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

EXPLANATION OF WATER-QUALITY RECORDS

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites. Data for precipitation-quality stations appear next. The table of ground-water quality data follow the ground-water level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number.

Descriptive Headings

For continuing record stations, data are preceded by information pertinent to the history of station operation. These descriptive headings give details regarding locations, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Headings for precipitation-quality records include location information and a description of the sample collector.

There is a broad range of water-quality parameters available for most stations whose record exceeds more than a few years operation. Sampling schedules are often intermittant for certain types of data, with analyses available for some but not all years within a stations's period of record. An acurate description of the variety of data available is shown by grouping similar parameters into a few general categories, which are listed in the "PERIOD OF RECORD" paragraph. Each category of data is followed by a notation of the water year(s) for which data is available and a letter code describing the frequency of sampling (see following section, "Frequency-of-Sampling Notation"). Thus, CHEMICAL DATA: 1972-74(c), 1977-81(a).", shows there are at least six analyses each year for the first three years of record, no data for this category in 1975 and 1976, and 1 or 2 samples for each of the five most recent years.

Categories of Water-Quality Data

The "PERIOD OF RECORD" paragraph lists the following categories of data to describe information available.

CHEMICAL DATA: Usually includes most of the "major ions", and may often include some of the following physical properties: specific conductance, pH, temperature, color, turbidity, dissolved oxygen.

MINOR ELEMENT DATA: Comprises the "heavy metals" and some of the "alkaline earth" groups. Determinations often include some but not all of the following: Al, As, Ba, Cd, Cr, Co, Cu, Hg, Li, Ni, Pb, Se, Sn, Sr, Zn.

RADIOCHEMICAL DATA: The determinations of the concentration of individual radioactive elements, such as radium 226, cobalt 60, strontium 90, and tritium. This category also includes the gross mesurement of radioactivity (alpha, beta, gamma) without regard to the radiochemical species that produce the radioactivity.

PESTICIDE DATA: The organic compounds (insecticides and herbicides) used to control insects and plants. Routinely, the analyses searches for traces of between 12 to 22 compounds.

ORGANIC DATA. Organic data (other than pesticides) such as, OC, PCB, PCN.

NUTRIENT DATA: Constituents containing nitrogen or phosphorus. Results usually include several of the following: nitrate plus nitrate, phosphorus, ammonia nitrogen, organic nitrogen, ammonia nitrogen plus organic nitrogen (Kjeldahl nitrogen).

BIOLOGICAL DATA: The identification and concentration of microscopic plant organisms (phytoplankton, periphyton), or enteric bacteria (total coliform, fecal coliform, or fecal streptococcal) living in aquatic habitats.

SEDIMENT DATA: Suspended-sediment concentration, suspended-sediment discharge, and particle-size data for discrete samples.

Frequency-of-Sampling Notation

The categories of data given in the "PERIOD OF RECORD" paragraph are followed by the water year(s) for which that kind of data was collected. The amount of data available is specified by the following letter codes:

(a) 1 or 2 samples per year.
(b) 3 to 5 samples per year.
(c) 6 to 9 samples per year.
(d) 10 to 20 samples per year.
(e) more than 20 samples per year.

Water Analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Terminology used in reporting chemical constituents is an indication of whether all or only part of a constituent associated with the solids in a water-quality sample is determined by a chemical analysis. (See preceding section, "Definition of Terms.") The "recoverable" in the terms "Suspended, recoverable", "Total, recoverable", and "Recoverable from bottom material" indicates that the constituent was digested by a method that results in the dissolution of only readily soluble substances. Thus, the determination may not represent all of the constituent actually present in the sample. The "total" in the terms "Total", "Suspended, total", and "Total in bottom material" is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures and/or maximum and minimum temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of Data

Ground-water level data consist of water-level measurements made in observation wells. Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude and (2) a local number that is provided for local needs. See figure 1.

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well; National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based. If known, the altitude of the land-surface datum above National Geodetic Vertical Datum of 1929 is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported as mean daily values, then monthly and yearly means are computed from the daily figures. Water levels in wells not equipped with recording gages are measured periodically, usually weekly, with a weighted tape.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

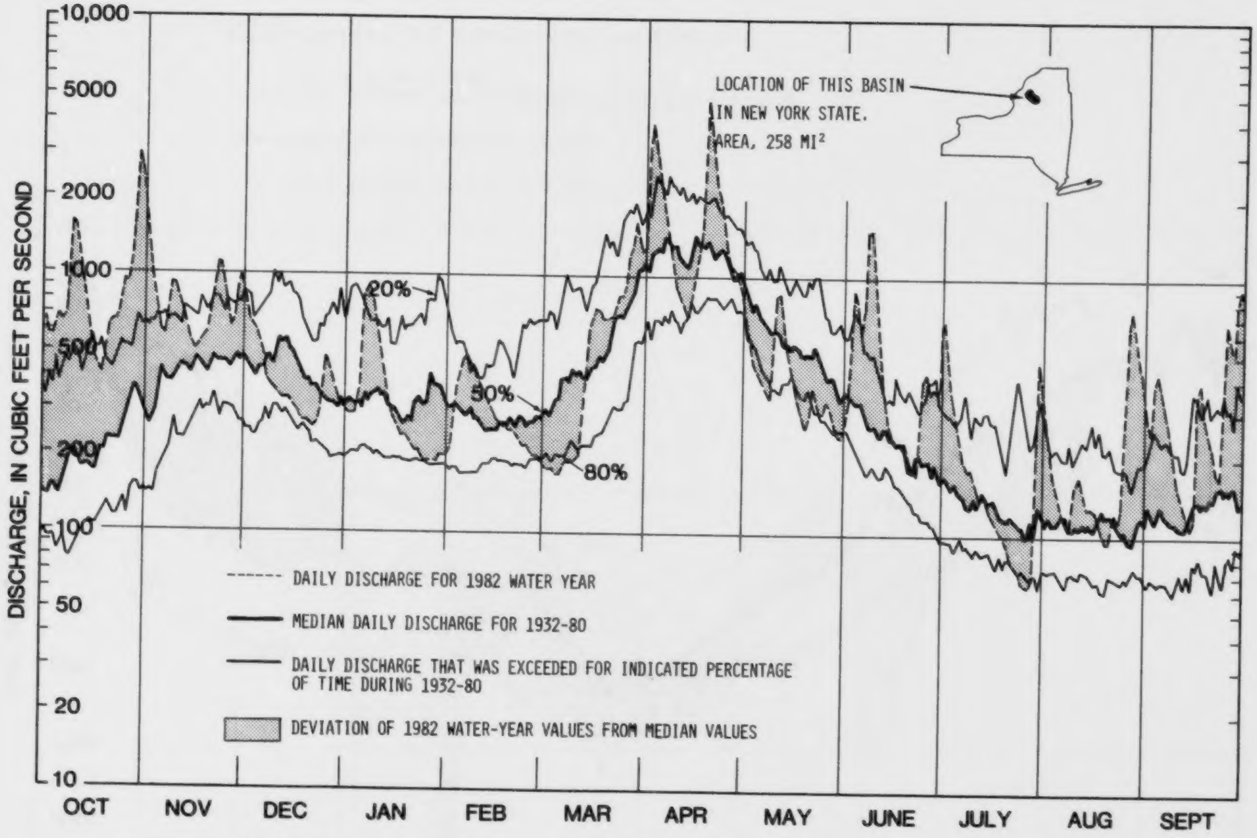


Figure 2.--Hydrographic comparisons, West Branch Oswegatchie River near Harrisville, N.Y.

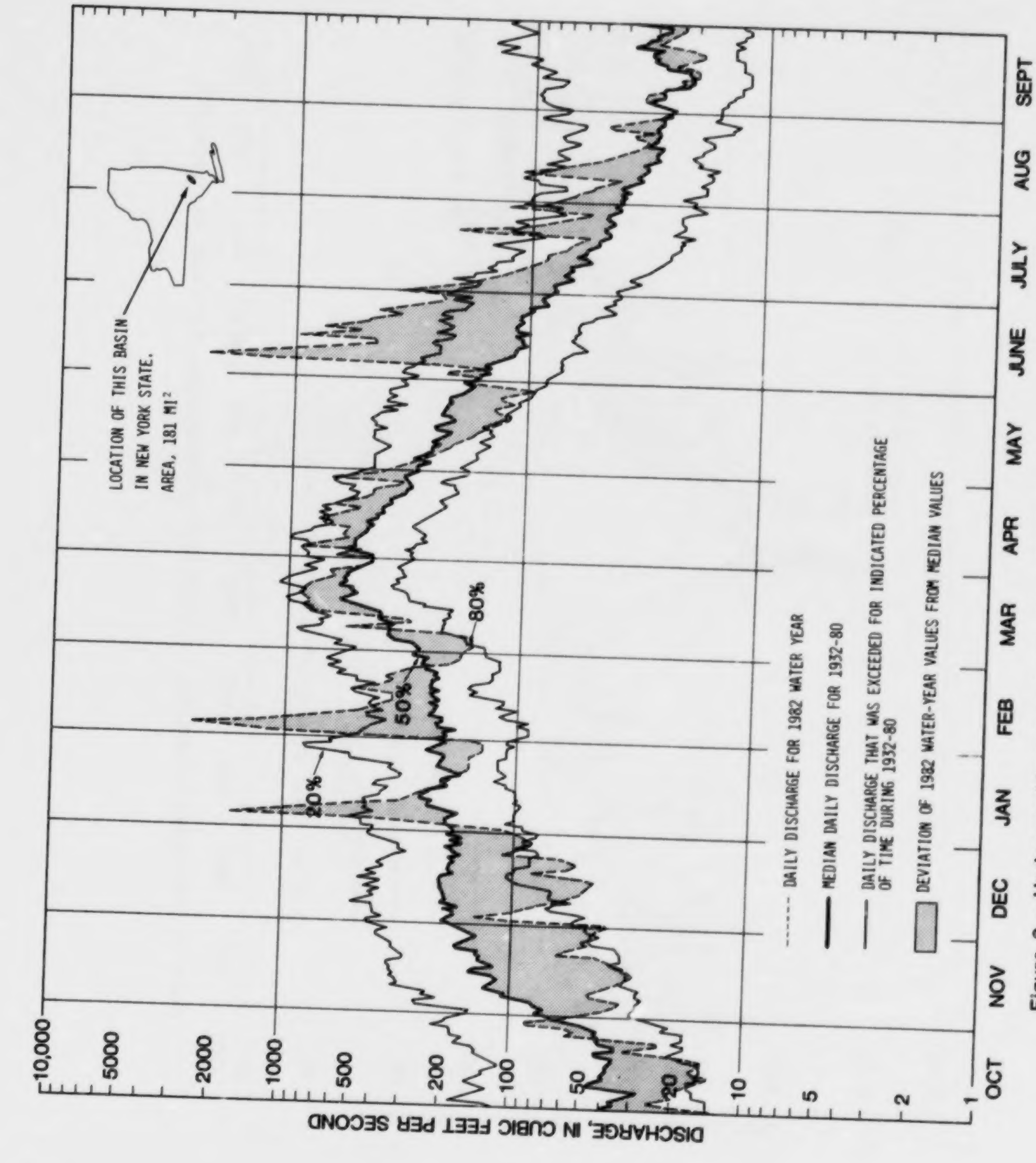
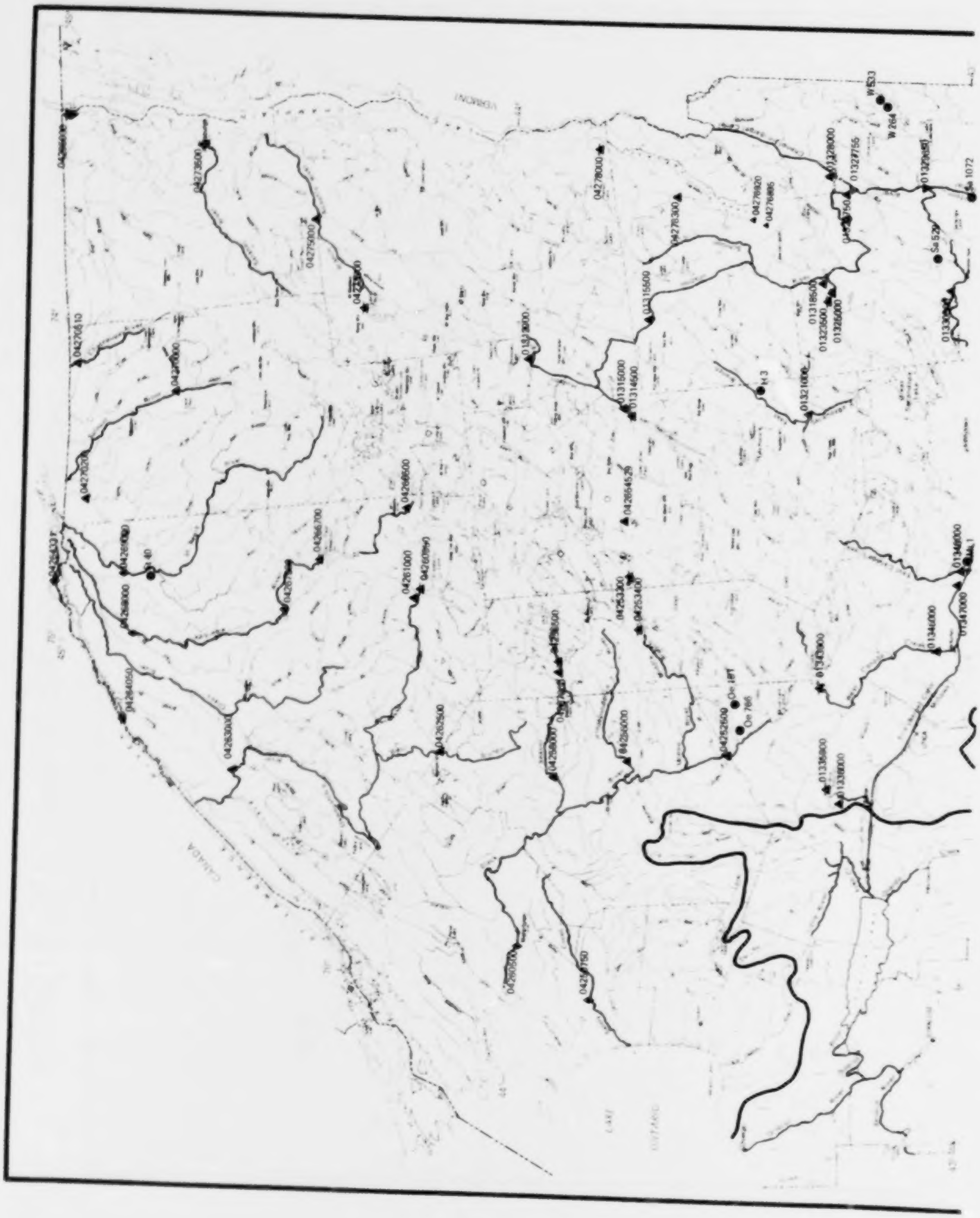


Figure 3.--Hydrographic comparisons, Wappinger Creek near Wappingers Falls, N.Y.



Reproduced from best available copy.

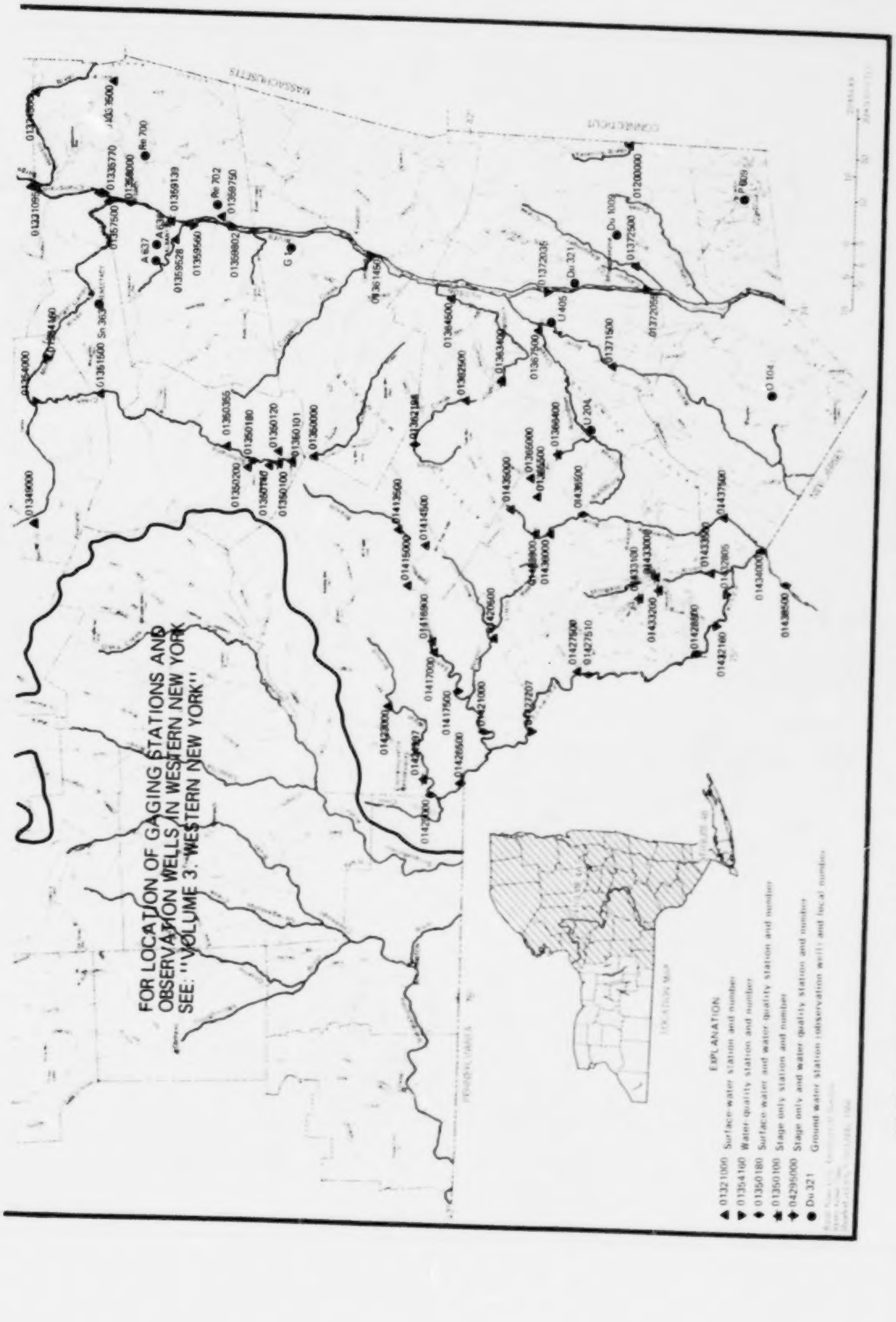


FIGURE 4A.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

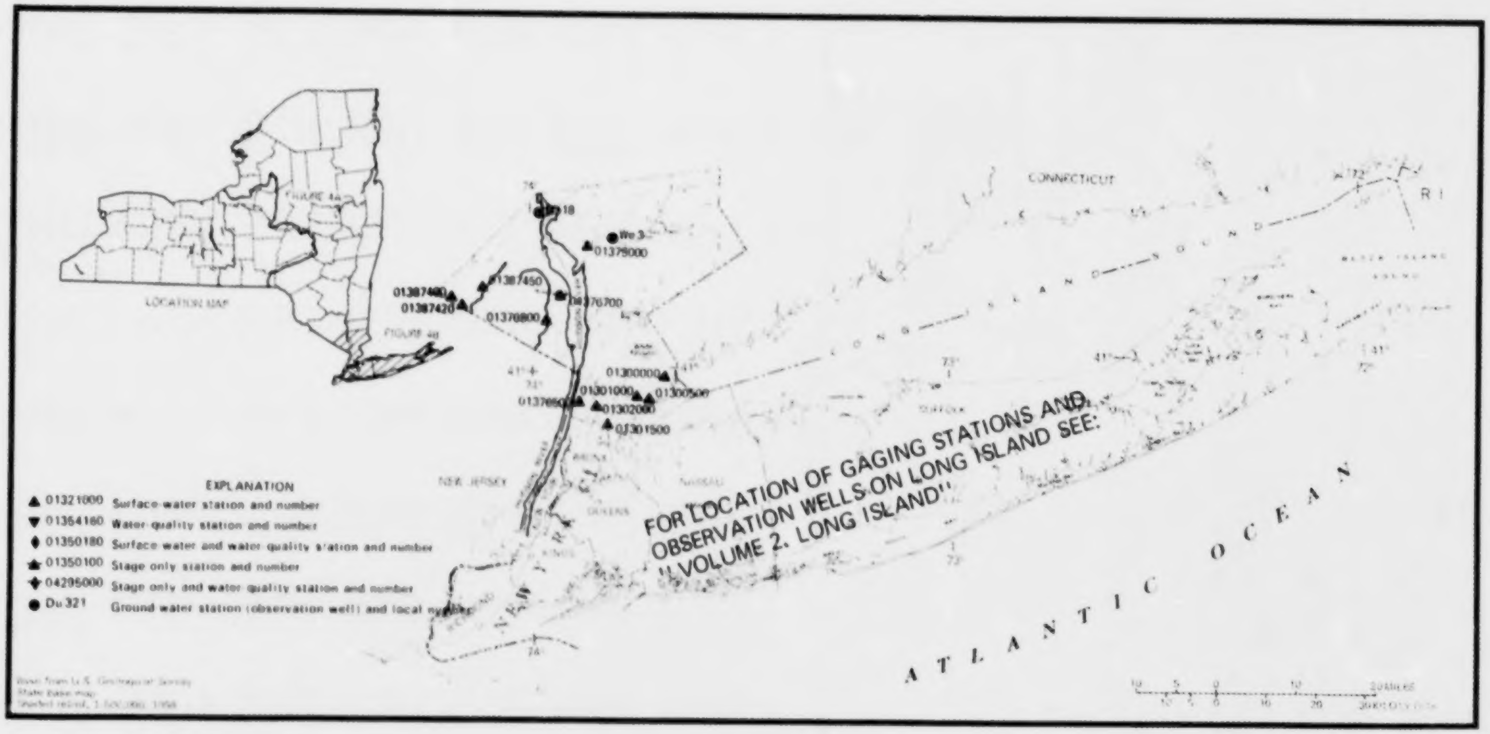

LOCATION MAP
FIGURE 4A
FIGURE 4B
CONNECTICUT
R I
LONG ISLAND SOUND
ATLANTIC OCEAN
NEW JERSEY
NASSAU
SUFFOLK
QUEENS
BRONX
NEW YORK
74°
41°
73°
72°
01387400
01387420
01387450
01376700
01370800
01379000
We 3
01300000
01301000
01300500
01376500
01302000
01301500
FOR LOCATION OF GAGING STATIONS AND
OBSERVATION WELLS ON LONG ISLAND SEE:
"VOLUME 2. LONG ISLAND"
EXPLANATION
▲ 01321000 Surface-water station and number
▼ 01364160 Water quality station and number
◆ 01350180 Surface water and water quality station and number
01350100 Stage only station and number
04295000 Stage only and water quality station and number
● Du 321 Ground water station (observation well) and local number
Base from U.S. Geological Survey
State base map
MILES
KILOMETERS

FIGURE 4B.-- LOCATION OF GAGING STATIONS AND OBSERVATION WELLS

HOUSATONIC RIVER BASIN

01200000 TENMILE RIVER NEAR GAYLORDSVILLE, CT

LOCATION.--Lat 41°39'32", long 73°31'44", Dutchess County, New York, Hydrologic Unit 01100005, on right bank 0.1 mi (0.2 km) downstream from Deuel Hollow Brook, 1.2 mi (1.9 km) upstream from New York-Connecticut State line, 1.7 mi (2.7 km) upstream from mouth, and 2.5 mi (4.0 km) northwest of Gaylordsville.

DRAINAGE AREA.--203 mi^2 (526 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for period October to December 1929, published in WSP 1301.

REVISED RECORDS.--WSP 1201: 1939. WSP 1701: 1955-56, 1957(M), 1958-59. WSP 1901: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 304.4 ft (92.78 m), National Geodetic Vertical Datum of 1929, (levels to Connecticut Light and Power Company).

REMARKS.--Records good. Infrequent regulation at low flow. Records of iron, specific conductance, and pH of daily samples for 1958-59 available in district office at Hartford, Connecticut. Chemical analyses available for water years 1959 (WSP 1641), 1968 (WSP 2091), 1973-74 (WRDC 1973-74), 1975 (WDR CT-75-1), 1980 (WDR CT-80-1), and water temperatures available for water year 1959 (WSP 1641).

AVERAGE DISCHARGE.--53 years, 302 ft^3/s (8.553 m^3/s), 20.20 in/yr (513 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,400 ft^3/s (493 m^3/s) Aug. 19, 1955, gage height, 14.9 ft (4.54 m), from high-water mark, from rating curve extended above 9,800 ft^3/s (278 m^3/s); minimum, 5 ft^3/s (0.14 m^3/s) Sept. 8, 1957; minimum gage height, 0.52 ft (0.158 m) Sept. 24, 26, 1939; minimum daily discharge, 7 ft^3/s (0.20 m^3/s) Oct. 7, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (39.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 3	1230	*5130	145	*7.93	2.417
June 7	0200	2970	84.1	6.10	1.859

Minimum discharge, 21 ft^3/s (0.59 m^3/s) Sept. 17, 18, gage height, 0.73 ft (0.223 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	76	68	154	682	200	677	433	246	301	107	39
2	40	72	174	227	841	190	560	397	346	251	84	41
3	56	66	216	213	1500	180	599	362	310	221	80	56
4	52	61	178	471	3360	188	1240	342	235	203	73	56
5	42	58	158	1390	2390	243	928	317	560	183	67	56
6	37	66	139	1120	1680	277	782	301	1710	165	64	46
7	34	75	120	835	1120	356	603	295	2270	149	60	40
8	32	75	107	649	800	672	697	277	1420	141	56	34
9	31	67	112	523	650	415	706	268	1070	129	112	30
10	29	63	103	422	550	349	672	257	814	118	105	28
11	29	61	103	333	450	346	782	238	630	110	128	27
12	27	60	97	313	425	514	803	221	514	108	143	26
13	27	58	90	298	400	687	762	219	518	107	116	25
14	25	56	85	270	350	825	777	208	1040	99	88	24
15	25	58	103	260	325	809	682	196	793	90	70	23
16	25	67	114	250	535	706	617	188	635	83	58	23
17	25	70	158	240	649	706	586	181	663	80	53	22
18	30	85	145	230	498	721	767	165	573	73	52	21
19	60	95	137	220	444	777	687	158	479	68	49	35
20	73	95	122	210	418	721	590	191	463	198	46	26
21	68	112	118	200	415	731	543	171	426	263	44	34
22	60	105	112	190	386	721	514	147	390	171	41	35
23	58	94	135	170	349	697	459	143	441	147	39	40
24	108	83	196	150	336	653	441	158	390	122	37	44
25	120	76	186	140	280	625	408	167	329	97	60	42
26	124	72	196	130	240	697	401	156	292	81	76	39
27	139	72	167	128	220	731	782	133	271	73	76	44
28	139	73	147	120	210	586	617	122	254	105	72	46
29	128	72	147	183	---	527	535	219	304	201	58	44
30	101	70	143	230	---	494	475	277	411	145	45	42
31	94	---	129	208	---	490	---	240	---	126	40	---
TOTAL	1868	2213	4205	10477	20503	16834	19692	7147	18797	4408	2203	1088
MEAN	60.3	73.8	136	338	732	543	656	231	627	142	71.1	36.3
MAX	139	112	216	1390	3360	825	1240	433	2270	301	143	56
MIN	25	56	68	120	210	180	401	122	235	68	37	21
CFSM	.30	.36	.67	1.67	3.61	2.68	3.23	1.14	3.09	.70	.35	.18
IN.	.34	.41	.77	1.92	3.76	3.08	3.61	1.31	3.44	.81	.40	.20

CAL YR 1981 TOTAL 66653 MEAN 188 MAX 1880 MIN 16 CFSM .93 IN 12.58
WTR YR 1982 TOTAL 109435 MEAN 300 MAX 3360 MIN 21 CFSM 1.48 IN 20.05

01300000 BLIND BROOK AT RYE, NY

LOCATION.--Lat 40°59'00", long 73°41'14", Westchester County, Hydrologic Unit 02030102, on left bank at Rye, just upstream from bridge on Theodore Fremd Avenue, 0.25 mi (0.40 km) southwest of Penn Central Transportation Co. railroad station, and 0.85 mi (1.37 km) upstream from mean high tide in Milton Harbor.

DRAINAGE AREA.--9.20 mi^2 (23.8 km^2).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 13.05 ft (3.978 m) National Geodetic Vertical Datum of 1929 (levels by City of Rye).

REMARKS.--Records fair. Medium and high flows affected by detention reservoir 2 mi (3 km) upstream (capacity, about 26 acre-ft (32,100 m^3) at spillway level or 50 acre-ft (61,700 m^3) at crest of concrete dam).

AVERAGE DISCHARGE.--38 years (1945-82), 15.5 ft^3/s (0.439 m^3/s), 22.88 in/yr (581 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,320 ft^3/s (65.7 m^3/s) June 19, 1972, gage height, 12.44 ft (3.792 m), from floodmark in gage house, from rating curve extended above 800 ft^3/s (22.7 m^3/s) on basis of indirect measurement of peak flow; minimum, 0.12 ft^3/s (0.003 m^3/s) July 5, 1953, gage height, 0.80 ft (0.244 m), result of temporary regulation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 853 ft^3/s (24.2 m^3/s) Jan. 4, gage height 6.27 ft (1.911 m), only peak discharge above base of 406 ft^3/s (11 m^3/s); minimum discharge, 0.89 ft^3/s (0.025 m^3/s) Sept. 17, 18, 19, gage height, 0.97 ft (0.296 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	5.7	22	40	141	7.2	13	18	12	7.1	5.5	4.5
2	30	5.5	116	29	39	7.2	8.0	15	22	6.5	4.3	8.7
3	6.0	5.0	33	16	194	7.4	36	13	9.7	6.0	3.3	10
4	3.9	4.7	17	417	88	7.8	104	12	7.1	6.5	2.7	5.2
5	3.3	4.7	14	94	36	9.0	23	11	32	5.5	2.6	3.7
6	3.1	25	11	38	26	12	21	10	56	4.7	2.2	2.9
7	3.5	11	10	33	19	33	20	10	39	4.1	2.1	2.7
8	3.3	6.8	11	25	17	35	20	9.0	18	3.7	1.9	2.6
9	2.7	5.7	15	21	15	16	22	8.7	12	3.5	11	2.7
10	2.4	5.2	10	16	12	13	27	8.0	9.3	3.1	7.7	2.9
11	2.4	5.2	9.0	13	11	15	31	7.1	7.7	2.9	4.3	2.4
12	2.4	5.2	8.3	12	10	18	23	6.8	7.1	3.1	4.5	1.9
13	2.2	4.7	8.0	11	9.6	17	20	7.1	25	3.5	3.9	1.7
14	2.2	4.5	8.3	11	9.4	16	18	6.5	66	3.1	2.9	1.4
15	2.2	6.5	70	10	10	12	15	6.0	19	2.7	2.2	1.3
16	1.9	14	107	9.8	13	12	13	5.5	29	2.6	1.9	1.2
17	2.1	11	39	9.6	13	23	13	5.2	93	2.4	1.8	.99
18	6.5	12	25	9.0	10	20	33	4.5	23	2.4	1.5	.99
19	16	7.4	19	8.6	11	14	16	4.7	16	2.2	1.5	.89
20	3.7	16	14	8.4	13	13	13	5.0	14	21	1.5	1.3
21	2.4	15	12	8.2	15	14	12	4.5	11	10	1.7	1.7
22	2.2	8.7	12	9.0	13	14	11	4.3	9.3	4.5	1.3	1.8
23	12	7.1	16	16	10	11	10	8.0	8.7	3.3	7.7	1.3
24	33	6.3	18	30	9.0	10	10	11	7.7	2.7	10	1.2
25	7.7	5.7	12	15	7.8	9.7	9.3	6.8	6.0	2.4	40	1.1
26	34	5.5	11	12	7.6	12	58	5.5	6.5	2.1	11	.99
27	25	6.0	11	11	7.4	11	107	4.7	10	3.1	6.0	13
28	36	6.0	10	9.8	7.2	8.7	55	4.5	6.8	38	4.7	5.7
29	11	5.2	10	9.7	---	8.3	29	57	16	11	3.1	2.2
30	8.0	5.2	11	10	---	8.3	22	14	22	5.5	2.6	1.5
31	6.5	---	11	18	---	9.3	---	20	---	4.3	2.6	---
TOTAL	281.3	236.5	700.6	980.1	774.0	423.9	812.3	313.4	620.9	183.5	160.0	90.46
MEAN	9.07	7.88	22.6	31.6	27.6	13.7	27.1	10.1	20.7	5.92	5.16	3.02
MAX	36	25	116	417	194	35	107	57	93	38	40	13
MIN	1.9	4.5	8.0	8.2	7.2	7.2	8.0	4.3	6.0	2.1	1.3	.89
CFSM	.99	.86	2.46	3.44	3.00	1.49	2.95	1.10	2.25	.64	.56	.33
IN.	1.14	.96	2.83	3.96	3.13	1.71	3.28	1.27	2.51	.74	.65	.37

CAL YR 1981 TOTAL 3700.48 MEAN 10.1 MAX 137 MIN .54 CFSM 1.10 IN 14.96
WTR YR 1982 TOTAL 5576.96 MEAN 15.3 MAX 417 MIN .89 CFSM 1.66 IN 22.55

01300500 BEAVER SWAMP BROOK AT MAMARONECK, NY

LOCATION.--Lat 40°57'21", long 73°43'07", Westchester County, Hydrologic Unit 02030102, on right bank just downstream from bridge on Short Street, in Mamaroneck, 0.2 mi (0.3 km) downstream from Brentwood Brook, and 0.2 mi (0.3 km) upstream from tidal barrier in Guion Creek, Mamaroneck Harbor.

DRAINAGE AREA.--4.71 mi (12.2 km^2).

PERIOD OF RECORD.--November 1943 to current year. Prior to October 1967, published as "near Harrison."

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.99 ft (7.617 m) National Geodetic Vertical Datum of 1929. Prior to June 8, 1946, nonrecording gage at same site and datum.

REMARKS.--Records fair. Flow affected by natural storage in swampy areas above station.

AVERAGE DISCHARGE.--38 years (1945-82), 6.42 ft^3/s (0.182 m^3/s), 18.51 in/yr (470 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 288 ft^3/s (8.16 m^3/s) Jan. 21, 1979, gage height, 4.28 ft (1.305 m); minimum, no flow at times during 1944, 1953, 1959, 1964, 1965, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 141 ft^3/s (3.99 m^3/s) Jan. 4, gage height 2.44 ft (0.744 m), only peak discharge above base of 86 ft^3/s (2.44 m^3/s); minimum discharge, 0.17 ft^3/s (0.005 m^3/s) Aug. 23, Sept. 13, 14, 19, 20; minimum gage height 0.30 ft (0.091 m) Oct. 1, Aug. 23; minimum daily discharge, 0.22 ft^3/s (0.006 m^3/s) Sept. 12-15, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	2.4	5.1	12	52	3.0	6.1	7.5	3.8	3.4	2.4	.89
2	7.6	2.1	36	10	24	3.0	3.6	6.4	8.3	2.4	1.2	1.6
3	2.1	1.6	15	5.8	73	3.1	13	5.7	4.0	2.4	.79	3.5
4	1.1	1.5	6.7	92	46	3.4	35	5.4	2.9	2.6	.74	1.1
5	.79	1.4	5.4	88	20	5.2	12	4.8	14	1.9	.76	.67
6	.62	8.8	4.4	30	13	6.0	10	4.0	21	1.7	.72	.67
7	.73	5.0	3.8	16	9.1	14	9.5	4.0	16	1.6	.61	.58
8	.60	2.8	4.6	11	6.6	15	9.8	3.5	7.9	1.3	.50	.50
9	.51	2.3	4.9	9.4	5.6	7.4	10	3.3	4.9	1.2	5.4	.43
10	.46	2.3	3.7	7.0	5.0	6.5	11	2.9	3.8	1.0	2.1	.31
11	.53	2.3	2.9	5.2	4.3	6.3	12	2.7	3.1	.89	1.4	.31
12	.62	2.2	2.4	4.8	3.9	6.8	8.4	2.3	2.9	1.1	1.9	.22
13	.58	2.1	2.7	4.6	3.7	6.9	7.1	2.7	13	1.0	.89	.22
14	.59	2.2	3.2	4.3	3.5	6.0	6.1	2.1	30	.95	.67	.22
15	.61	3.7	27	4.1	3.6	5.1	5.2	1.6	10	.93	.50	.22
16	.61	7.2	40	4.0	4.7	4.8	5.1	1.6	11	.81	.43	.26
17	.39	6.7	19	3.9	4.8	12	5.0	1.9	32	.72	.43	.31
18	2.8	6.9	11	3.8	4.1	10	13	1.9	11	.63	.36	.26
19	5.4	5.1	8.4	3.6	5.2	8.1	6.6	1.9	7.1	.68	.43	.22
20	1.4	6.5	6.6	3.5	5.6	6.4	5.5	1.9	5.8	10	.36	.43
21	.84	3.5	5.1	3.3	5.6	6.0	4.8	1.4	4.7	3.8	.31	.36
22	.52	2.5	4.6	3.4	5.0	5.5	4.2	1.0	3.9	1.7	.26	.36
23	4.4	2.5	5.9	7.9	4.0	4.7	3.9	1.8	4.1	1.2	1.8	.43
24	10	2.3	5.3	14	3.6	4.3	3.7	2.1	2.9	.87	1.5	.31
25	3.6	1.9	4.7	6.8	3.2	4.1	3.4	1.8	2.5	.66	15	.26
26	15	1.6	4.3	5.0	3.2	5.0	14	1.6	2.3	.51	4.5	.26
27	11	1.6	4.2	4.3	3.0	4.0	27	1.4	2.8	.54	1.4	3.5
28	15	1.7	4.0	4.6	3.0	3.2	21	1.2	2.2	11	1.0	1.1
29	6.6	1.7	4.2	3.5	---	3.1	12	26	7.2	4.2	.58	.67
30	4.1	1.6	3.6	3.1	---	3.3	9.2	7.1	7.6	1.9	.50	.50
31	3.1	---	3.4	8.2	---	4.9	---	5.1	---	1.6	.31	---
TOTAL	103.00	96.0	262.1	387.1	328.3	187.1	297.2	118.6	252.7	65.19	49.75	20.67
MEAN	3.32	3.20	8.45	12.5	11.7	6.04	9.91	3.83	8.42	2.10	1.60	.69
MAX	15	8.8	40	92	73	15	35	26	32	11	15	3.5
MIN	.39	1.4	2.4	3.1	3.0	3.0	3.4	1.0	2.2	.51	.26	.22
CFSM	.71	.68	1.79	2.65	2.48	1.28	2.10	.81	1.79	.45	.34	.15
IN.	.81	.76	2.07	3.06	2.59	1.48	2.35	.94	2.00	.51	.39	.16

CAL YR 1981 TOTAL 1430.57 MEAN 3.92 MAX 40 MIN .11 CFSM .83 IN 11.30
WTR YR 1982 TOTAL 2167.71 MEAN 5.94 MAX 92 MIN .22 CFSM 1.26 IN 17.12

01301000 MAMARONECK RIVER AT MAMARONECK, NY

LOCATION.--Lat 40°57'14", long 73°44'06", Westchester County, Hydrologic Unit 02030102, on left bank in Mamaroneck, 113 ft (34 m) downstream from bridge on Halstead Avenue, 700 ft (213 m) downstream from Sheldrake River, and 0.3 mi (0.5 km) upstream from mean high tide in Mamaroneck Harbor.

DRAINAGE AREA.--23.4 mi^2 (60.6 km^2).

PERIOD OF RECORD.--November 1943 to July 1953, September 1954 to current year.

REVISED RECORDS.--WSP 1502: 1944(M), 1951(M). WDR NY-76-1; 1972(M), 1973(M), 1974(M), 1975(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.46 ft (3.493 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1954, water-stage recorder at same site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records fair. Storage in former water-supply reservoir on Mamaroneck River, effect unknown.

AVERAGE DISCHARGE.--36 years (1945-52, 1955-82), 34.6 ft^3/s (0.980 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,700 ft^3/s (105 m^3/s) Sept. 26, 1975, gage height, 10.15 ft (3.094 m), from rating curve extended above 2,000 ft^3/s (56.6 m^3/s) on basis of indirect measurement of peak flow at 10.15 ft (3.094 m), minimum, 0.06 ft^3/s (0.002 m^3/s) Sept. 30, 1965, minimum daily, 0.10 ft^3/s (0.003 m^3/s) Sept. 29, 30, 1965, minimum gage height since Sept. 9, 1954, 0.10 ft (0.030 m) July 21, 22, Aug. 18, 19, 1957, Aug. 14, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Backwater from hurricane wave reached a stage of about 11.5 ft (3.51 m) present datum, Sept. 21, 1938, from information by officials of village of Mamaroneck.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft^3/s (56.6 m^3/s) Jan. 4, gage height, 6.12 ft (1.865 m), minimum, 2.8 ft^3/s (0.079 m^3/s) Sept. 19, 20, gage height, 0.28 ft (0.085 m), minimum daily, 3.1 ft^3/s (0.088 m^3/s) Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	15	26	81	266	18	39	50	31	20	19	6.9
2	62	14	240	70	71	18	25	44	54	14	7.9	16
3	13	13	58	48	490	19	97	38	43	14	6.5	17
4	8.4	12	55	905	205	21	197	35	31	16	5.6	7.4
5	7.3	12	66	181	134	24	66	32	75	12	5.6	5.2
6	7.2	57	57	103	85	30	80	30	93	11	5.2	4.9
7	7.9	22	23	84	68	89	84	29	73	11	4.5	5.2
8	6.5	15	24	62	52	95	66	27	37	11	4.1	4.5
9	5.6	13	28	43	47	66	57	26	27	9.9	28	4.5
10	5.2	12	21	35	44	35	65	24	20	9.4	15	4.9
11	5.2	12	20	27	40	35	68	21	19	8.9	7.4	4.1
12	5.2	11	18	23	38	42	57	19	16	9.4	9.9	4.1
13	5.5	11	16	22	33	38	50	21	55	9.9	6.9	3.8
14	5.8	11	17	20	30	34	45	18	123	8.9	5.2	3.8
15	5.5	13	153	19	29	31	38	16	39	8.4	4.9	3.8
16	4.8	28	240	19	32	30	35	14	51	7.9	4.9	3.8
17	4.4	17	99	19	31	55	34	14	172	6.5	8.9	3.8
18	10	23	76	19	28	43	87	14	47	5.6	16	3.4
19	40	16	51	19	38	34	40	14	35	5.2	4.9	3.1
20	8.6	35	34	20	42	30	34	14	31	57	4.1	3.8
21	6.4	26	29	21	33	33	48	14	26	18	3.8	7.4
22	6.0	19	29	37	28	31	47	12	23	8.4	3.4	4.9
23	35	16	35	71	20	28	28	21	24	6.5	9.9	5.2
24	65	14	32	73	18	27	27	25	19	6.0	21	4.9
25	16	14	28	39	20	26	25	16	16	5.6	80	3.8
26	84	12	25	30	19	30	117	14	15	5.2	20	3.4
27	66	14	26	26	18	25	202	12	17	5.2	8.4	32
28	97	13	35	25	18	22	153	11	14	66	6.9	9.9
29	47	12	26	24	---	30	84	132	34	19	5.6	5.2
30	26	12	23	23	---	45	65	27	48	9.4	5.2	4.1
31	17	---	22	43	---	29	---	38	---	7.9	4.9	---
TOTAL	690.7	514	1632	2231	1977	1113	2060	822	1308	413.2	343.6	194.8
MEAN	22.3	17.1	52.6	72.0	70.6	35.9	68.7	26.5	43.6	13.3	11.1	6.49
MAX	97	57	240	905	490	95	202	132	172	66	80	32
MIN	4.4	11	16	19	18	18	25	11	14	5.2	3.4	3.1

CAL YR 1981 TOTAL 9714.7 MEAN 26.6 MAX 322 MIN 2.0
WTR YR 1982 TOTAL 13299.3 MEAN 36.4 MAX 905 MIN 3.1

HUTCHINSON RIVER BASIN

01301500 HUTCHINSON RIVER AT PELHAM, NY

LOCATION.--Lat 40°54'41", long 73°48'55", Westchester County, Hydrologic Unit 02030102, on right bank in Pelham, just upstream from Penn Central Transportation Co. bridge, 100 ft (30 m) downstream from Pelham Lake, and 1.5 mi (2.4 km) west of New Rochelle.

DRAINAGE AREA.--5.76 mi^2 (14.9 km^2).

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.92 ft (3.938 m) National Geodetic Vertical Datum of 1929 (levels by county of Westchester).

REMARKS.--Records poor. Flow controlled by Pelham Lake and three reservoirs above station.

AVERAGE DISCHARGE.--38 years, 6.98 ft^3/s (0.198 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft^3/s (14.9 m^3/s) Aug. 28, 1971, gage height, 5.18 ft (1.579 m), from rating curve extended above 200 ft^3/s (5.66 m^3/s), maximum gage height, 5.38 ft (1.640 m) Jan. 21, 1979; minimum, 0.01 ft^3/s (<0.001 m^3/s) July 27, 1957; minimum daily, 0.02 ft^3/s (0.001 m^3/s) Aug. 2-6, 1955, July 26, 27, 1957, Oct. 26-30, 1964; minimum gage height, 1.86 ft (0.567 m) Aug. 2, 5, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 311 ft^3/s (8.81 m^3/s) Jan. 4, gage height, 4.78 ft (1.457 m); minimum, 0.16 ft^3/s (0.005 m^3/s) Sept. 25, 26, 27, gage height, 2.23 ft (0.680 m); minimum daily, 0.20 ft^3/s (0.006 m^3/s) Sept. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.5	7.9	14	70	2.8	8.2	6.1	5.6	5.6	1.4	2.5
2	15	2.2	45	11	28	2.9	7.9	5.8	5.8	3.9	1.3	5.1
3	7.1	1.9	15	5.3	109	2.8	24	5.6	4.4	2.9	1.1	5.6
4	4.0	1.3	5.8	145	35	4.1	44	5.1	3.3	2.3	1.1	2.5
5	2.8	1.3	3.1	61	14	8.2	14	4.8	9.6	1.7	1.3	2.3
6	1.7	14	3.3	16	9.2	6.4	14	4.4	15	1.6	1.1	2.1
7	1.7	12	4.1	11	7.0	15	15	4.1	14	1.6	.91	3.9
8	1.3	5.3	3.9	8.9	5.8	17	12	3.9	7.6	1.6	.80	2.1
9	2.3	4.6	2.9	7.0	6.1	9.2	9.6	3.7	5.3	1.4	5.3	1.4
10	1.8	2.8	3.5	6.4	6.1	6.7	11	3.5	4.6	1.3	2.1	1.0
11	1.2	1.9	3.1	5.1	4.8	6.1	12	3.1	3.9	1.3	2.3	1.0
12	.69	1.6	2.3	5.3	4.4	9.2	11	2.5	4.1	1.3	3.7	.80
13	.73	1.6	1.7	5.6	4.1	9.6	9.9	4.1	11	1.3	1.6	.71
14	.80	2.3	2.1	7.6	3.9	8.5	9.2	3.5	24	.91	.80	.71
15	.87	3.9	30	7.3	3.9	7.9	7.6	3.3	11	.91	.71	.62
16	1.2	7.3	44	6.1	4.4	7.0	6.7	2.9	6.4	.91	.71	.54
17	1.6	7.3	15	4.8	4.4	14	6.7	2.5	22	.71	.71	.54
18	3.8	6.4	8.2	4.6	3.9	12	17	2.3	11	.91	.80	.47
19	4.6	7.3	5.3	4.6	6.4	9.6	9.2	2.1	6.4	1.6	.80	.40
20	4.2	13	3.7	4.8	7.3	7.9	6.1	2.8	4.8	6.7	.80	.91
21	3.4	7.9	3.1	4.8	5.6	8.2	5.3	3.9	3.9	1.3	.80	.91
22	2.6	5.1	3.1	4.4	4.8	8.2	4.6	2.9	3.3	.80	.80	.54
23	7.8	3.9	4.4	9.6	4.1	7.3	4.1	5.3	3.7	.80	1.3	.62
24	16	2.8	3.9	18	11	4.8	3.9	4.8	2.8	.80	1.6	.36
25	7.1	2.1	3.3	8.5	5.3	4.4	3.7	4.8	2.5	.71	13	.20
26	18	1.7	2.9	5.6	3.1	5.3	19	3.9	2.3	.71	7.0	.20
27	15	1.9	3.9	3.9	2.9	5.3	38	3.3	1.9	.71	5.8	4.4
28	14	1.4	4.6	3.5	2.9	5.1	26	2.8	1.7	10	3.1	.62
29	6.8	1.4	3.7	3.5	---	4.1	13	27	6.1	4.8	1.9	.54
30	3.9	1.7	2.9	3.5	---	3.3	7.9	12	7.3	3.9	1.6	.62
31	2.8	---	2.3	13	---	5.8	---	7.9	---	2.1	1.6	---
TOTAL	156.39	130.4	248.0	419.7	377.4	228.7	380.6	154.7	215.3	67.08	67.84	44.21
MEAN	5.04	4.35	8.00	13.5	13.5	7.38	12.7	4.99	7.18	2.16	2.19	1.47
MAX	18	14	45	145	109	17	44	27	24	10	13	5.6
MIN	.69	1.3	1.7	3.5	2.9	2.8	3.7	2.1	1.7	.71	.71	.20

CAL YR 1981 TOTAL 1820.06 MEAN 4.99 MAX 64 MIN .25
WTR YR 1982 TOTAL 2490.32 MEAN 6.82 MAX 145 MIN .20

01302000 BRONX RIVER AT BRONXVILLE, NY

LOCATION.--Lat 40°56'09", long 73°50'10", Westchester County, Hydrologic Unit 02030102, on right bank in Bronxville, just upstream from Penn Central Transportation Co. bridge, and 800 ft (244 m) downstream from Grassy Sprain Brook.

DRAINAGE AREA.--26.5 mi² (68.6 km²), not including 18.1 mi² (46.9 km²), from which the entire flow is diverted for municipal water supply and drainage purposes.

PERIOD OF RECORD.--November 1943 to current year.

REVISED RECORDS.--WSP 1382: Drainage area. WRD NY 1971: 1961-67(P), 1968(M), 1970(M). WRD NY 1972: 1969(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 73.74 ft (22.476 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair. Diversions from 18.1 mi² (46.9 km²) for municipal water supply and flood control use. Included in these diversions is drainage from 12.8 mi² (33.2 km²) from Kensico Reservoir for City of New York, 4.58 mi² (11.9 km²) from Grassy Sprain Reservoir for Yonkers, 0.67 mi² (1.74 km²) for White Plains, and 0.1 mi² (0.3 km²) for flood control from outflow from Grassy Sprain Reservoir.

AVERAGE DISCHARGE.--38 years (1945-82), 41.1 ft³/s (1.164 m³/s), 21.06 in/yr (535 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) June 19, 1972, gage height, 9.63 ft (2.935 m), from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of flow through culvert computation of peak flow; minimum, 1.0 ft³/s (0.028 m³/s) Sept. 10, 1944, gage height, 0.14 ft (0.043 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s (16.99 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1130	*1120	31.7	*5.76	1.756
Feb. 3	0545	634	18.0	3.88	1.183

Minimum discharge, 4.7 ft³/s (0.13 m³/s) Oct. 17, gage height, 0.36 ft (0.110 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	46	91	245	24	55	46	25	22	38	13
2	85	13	210	49	69	24	32	43	41	18	13	26
3	14	12	38	31	381	24	131	40	22	19	11	33
4	8.9	13	26	490	139	24	168	38	20	22	9.6	11
5	7.7	13	23	160	82	25	53	35	61	16	9.4	8.0
6	7.9	67	19	90	67	30	53	34	69	15	8.7	7.3
7	9.2	20	19	76	56	86	50	32	65	14	8.4	6.8
8	7.2	14	27	64	52	66	47	31	31	14	7.9	6.9
9	6.5	12	26	56	50	36	46	30	25	13	58	6.7
10	6.2	12	18	47	46	34	53	28	22	12	24	6.9
11	5.9	12	17	40	43	34	58	27	20	11	11	7.4
12	6.3	11	16	38	40	47	50	27	19	14	16	6.8
13	6.2	11	15	37	39	39	55	33	75	16	10	6.8
14	6.3	11	18	36	36	35	46	26	96	12	8.2	7.0
15	6.5	14	136	35	35	32	41	25	32	11	7.8	7.0
16	6.1	32	180	34	39	33	40	23	39	11	7.5	7.8
17	5.7	18	55	32	38	61	41	23	139	10	7.7	8.1
18	21	25	42	32	34	44	95	22	38	10	7.3	6.2
19	63	14	35	31	37	37	45	21	30	11	6.9	5.5
20	12	43	30	30	38	35	41	25	27	87	6.8	9.5
21	8.4	25	28	29	39	41	39	21	24	27	6.6	15
22	7.0	15	27	27	34	37	34	20	23	14	6.2	11
23	68	13	33	40	32	34	32	41	29	11	22	17
24	86	12	33	65	29	33	31	33	21	11	25	8.9
25	21	12	27	36	28	31	29	23	19	9.6	94	6.4
26	73	11	25	30	26	43	151	20	18	9.0	24	5.9
27	46	12	26	28	26	33	141	18	22	11	11	59
28	53	11	26	28	25	29	119	18	19	112	8.9	15
29	21	10	26	28	---	29	60	139	61	25	7.4	8.0
30	16	9.7	25	29	---	29	50	31	61	13	7.3	7.0
31	14	---	22	56	---	44	---	37	---	12	7.2	---
TOTAL	716.0	511.7	1294	1895	1805	1153	1886	1010	1193	612.6	496.8	350.9
MEAN	23.1	17.1	41.7	61.1	64.5	37.2	62.9	32.6	39.8	19.8	16.0	11.7
MAX	86	67	210	490	381	86	168	139	139	112	94	59
MIN	5.7	9.7	15	27	25	24	29	18	18	9.0	6.2	5.5
CFSM	.87	.65	1.57	2.31	2.43	1.40	2.37	1.23	1.50	.75	.60	.44
IN.	1.01	.72	1.82	2.66	2.53	1.62	2.65	1.42	1.67	.86	.70	.49

CAL YR 1981 TOTAL 10547.6 MEAN 28.9 MAX 336 MIN 4.4 CFSM 1.09 IN 14.81
WTR YR 1982 TOTAL 12924.0 MEAN 35.4 MAX 490 MIN 5.5 CFSM 1.34 IN 18.14

01312000 HUDSON RIVER NEAR NEWCOMB, NY

LOCATION.--Lat 43°58'00", long 74°07'55", Essex County, Hydrologic Unit 02020001, on right bank 30 ft (9 m) downstream from bridge on State Highway 28N, 0.5 mi (0.8 km) downstream from outlet of Harris Lake, 2 mi (3 km) east of Newcomb, and 4 mi (6 km) upstream from Wolf Creek.

DRAINAGE AREA.--192 mi^2 (497 km^2).

PERIOD OF RECORD.--September 1925 to current year.

REVISED RECORDS.--WSP 696: 1928(M). WSP 711: 1930(m).

GAGE.--Water-stage recorder. Datum of gage is 1,550.38 ft (472.556 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1931, nonrecording gage at site 125 ft (38 m) downstream at same datum. Aug. 6, 1931 to Nov. 4, 1960, water-stage recorder on left bank at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Flow slightly regulated by small reservoirs above station.

AVERAGE DISCHARGE.--57 years, 396 ft^3/s (11.21 m^3/s), 28.01 in/yr (711 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft^3/s (211 m^3/s) Jan. 1, 1949, gage height, 11.40 ft (3.475 m), minimum, 11 ft^3/s (0.31 m^3/s) Sept. 3, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s (71 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 29	09[illegible]	3,120	88.4	6.82	2.079
Apr. 19	0900	*3,880	110	*7.80	2.377
Apr. 28	0500	2,640	74.8	6.17	1.881

Minimum discharge, 46 ft^3/s (1.30 m^3/s) July 27, 28, gage height, 0.95 ft (0.290 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	468	1120	251	131	110	94	444	1370	208	299	112	137
2	421	833	248	129	110	94	696	1340	611	257	125	135
3	394	646	242	126	120	94	901	1230	1780	237	134	187
4	372	530	235	138	140	94	994	1050	1730	230	135	277
5	361	452	225	182	160	94	1020	907	1180	201	131	265
6	350	417	215	230	180	94	924	822	873	169	137	220
7	402	452	201	262	190	94	733	793	833	144	132	182
8	534	456	203	254	180	94	580	918	788	134	122	148
9	642	421	191	227	160	94	489	1020	651	126	167	132
10	655	383	180	210	150	96	421	1130	518	116	421	119
11	572	347	175	191	140	100	368	1010	414	106	421	109
12	476	319	173	182	140	112	336	733	340	102	306	100
13	406	287	167	169	130	120	306	598	281	99	242	93
14	347	268	162	140	130	142	299	547	245	95	210	87
15	306	257	156	130	120	162	336	484	213	89	189	93
16	277	254	150	130	120	171	452	433	191	85	162	150
17	262	265	144	120	120	182	850	383	198	81	140	213
18	257	309	144	120	110	182	2480	333	213	77	123	210
19	326	333	138	120	110	178	3780	293	205	75	112	182
20	456	350	134	120	110	171	3190	448	232	71	112	152
21	440	440	131	110	110	171	2820	585	237	67	113	134
22	398	509	131	110	100	169	2730	464	230	62	106	122
23	376	472	135	110	100	163	2130	343	262	57	102	122
24	464	394	137	110	100	160	1770	296	493	53	100	213
25	514	343	135	110	98	162	2020	315	543	49	107	350
26	472	306	132	110	96	194	2350	299	440	48	242	326
27	777	293	129	110	96	237	2520	262	357	46	365	293
28	2190	296	131	110	94	296	2560	225	293	53	306	402
29	3030	290	134	110	---	315	2120	198	260	71	240	452
30	2380	271	131	110	---	302	1610	187	299	75	189	391
31	1620	---	129	110	---	312	---	187	---	77	160	---
TOTAL	20945	12313	5189	4521	3524	4943	42229	19203	15118	3451	5663	5996
MEAN	676	410	167	146	126	159	1408	619	504	111	183	200
MAX	3030	1120	251	262	190	315	3780	1370	1780	299	421	452
MIN	257	254	129	110	94	94	299	187	191	46	100	87
CFSM	3.52	2.14	.87	.76	.66	.83	7.33	3.22	2.63	.58	.95	1.04
IN.	4.06	2.39	1.01	.88	.68	.96	8.18	3.72	2.93	.67	1.10	1.16

CAL YR 1981 TOTAL 156523 MEAN 429 MAX 3630 MIN 79 CFSM 2.23 IN 30.33
WTR YR 1982 TOTAL 143095 MEAN 392 MAX 3780 MIN 46 CFSM 2.04 IN 27.72

01314500 INDIAN LAKE NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'20", long 74°16'35", Hamilton County, Hydrologic Unit 02020001, at Indian Lake Dam on Indian River, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--131 mi^2 (339 km^2).

PERIOD OF RECORD.--July 1900 to current year. Prior to October 1956, published as "Indian Lake Reservoir near Indian Lake."

GAGE.--Nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by masonry dam, completed in 1898. Usable capacity, about 4,500 mil ft^3 (127 hm^3) at elevation, 1,651.29 ft or 503.313 m (crest of spillway). Sills of double sluice gates at lowest outlet at elevation 1,615.50 ft (492.404 m). Dead storage unknown. Water is used for power development, for improvement of navigation in lower Hudson River, and to compensate for flow diverted from Hudson River at Glens Falls into Champlain (Barge) Canal.

COOPERATION.--Gage-height record furnished by Indian River Co.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,656.71 ft (504.965 m) Mar. 28, 1913, contents, 5,781 mil ft^3 (164 hm^3); minimum observed, 1,616.81 ft (492.804 m), estimated, Feb. 13, 1948, contents, 199 mil ft^3 (5.64 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 1,650.52 ft (503.078 m) June 11, contents, 4,519 mil ft^3 (128 hm^3); minimum observed, 1,634.47 ft (498.186 m) Mar. 26, contents 1,880 mil ft^3 (53.2 hm^3).

Capacity table, current water year
(elevation, in feet and capacity, in billions of cubic feet)

1,635.0	1.958	1,643.0	3.221
1,636.0	2.110	1,648.0	4.068
1,638.0	2.417	1,653.0	5.007

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1647.30	1647.19	1646.49	1644.04	1640.69	1637.23	1634.99	1648.81	1648.85	1650.15	1647.96	1647.44
2	1647.07	1647.13	1646.59	1643.92	1640.55	1637.06	1635.38	1649.11	1649.08	1650.13	1647.91	1647.52
3	1646.84	1647.00	1646.61	1643.78	1640.48	1636.92	1635.71	1649.29	1649.32	1650.10	1647.89	1647.51
4	1646.57	1646.87	1646.68	1643.73	1640.38	1636.76	1636.17	1649.44	1649.51	1650.02	1647.86	1647.48
5	1646.39	1646.70	1646.68	1643.68	1640.27	1636.64	1636.55	1649.51	1649.63	1649.94	1647.84	1647.48
6	1646.12	1646.53	1646.68	1643.77	1640.28	1636.57	1636.87	1649.51	1649.75	1649.86	1647.78	1647.45
7	1645.91	1646.42	1646.72	1643.76	1640.14	1636.50	1637.01	1649.51	1650.02	1649.73	1647.74	1647.42
8	1645.88	1646.30	1646.73	1643.76	1640.06	1636.39	1637.03	1649.49	1650.25	1649.66	1647.72	1647.34
9	1645.76	1646.11	1646.65	1643.71	1639.95	1636.21	1637.09	1649.45	1650.36	1649.53	1647.77	1647.31
10	1645.59	1645.91	1646.61	1643.64	1639.81	1636.05	1637.05	1649.44	1650.45	1649.39	1647.85	1647.28
11	1645.42	1645.74	1646.51	1643.56	1639.74	1635.95	1636.99	1649.41	1650.52	1649.25	1647.85	1647.24
12	1645.22	1645.52	1646.42	1643.49	1639.63	1635.71	1636.95	1649.33	1650.51	1649.10	1647.82	1647.20
13	1644.99	1645.33	1646.32	1643.38	1639.44	1635.58	1636.88	1649.23	1650.51	1649.00	1647.83	1647.18
14	1644.75	1645.12	1646.21	1643.31	1639.29	1635.51	1636.82	1649.11	1650.45	1648.79	1647.83	1647.18
15	1644.55	1644.91	1646.11	1643.11	1639.27	1635.44	1636.86	1648.96	1650.41	1648.71	1647.82	1647.10
16	1644.33	1644.72	1646.04	1642.93	1639.10	1635.36	1636.99	1648.79	1650.39	1648.64	1647.78	1647.05
17	1644.09	1644.82	1645.96	1642.75	1638.95	1635.30	1637.40	1648.64	1650.36	1648.53	1647.78	1646.93
18	1643.93	1644.92	1645.88	1642.63	1638.73	1635.20	1639.06	1648.59	1650.35	1648.46	1647.72	1646.91
19	1643.85	1645.05	1645.79	1642.51	1638.60	1635.11	1640.53	1648.42	1650.33	1648.38	1647.67	1646.77
20	1643.77	1645.11	1645.72	1642.43	1638.46	1634.97	1641.44	1648.42	1650.33	1648.32	1647.59	1646.67
21	1643.60	1645.41	1645.63	1642.37	1638.33	1634.88	1642.58	1648.36	1650.29	1648.28	1647.57	1646.59
22	1643.48	1645.57	1645.54	1642.26	1638.13	1634.81	1643.41	1648.31	1650.25	1648.24	1647.55	1646.48
23	1643.32	1645.63	1645.36	1642.01	1638.05	1634.73	1643.88	1648.25	1650.27	1648.19	1647.48	1646.41
24	1643.22	1645.82	1645.28	1641.71	1637.91	1634.62	1644.23	1648.25	1650.27	1648.13	1647.47	1646.44
25	1643.11	1645.88	1645.18	1641.58	1637.78	1634.53	1644.94	1648.31	1650.22	1648.09	1647.40	1646.34
26	1643.18	1645.98	1645.03	1641.49	1637.59	1634.47	1645.78	1648.36	1650.16	1648.04	1647.51	1646.24
27	1643.57	1646.09	1644.86	1641.38	1637.48	1634.52	1646.72	1648.34	1650.13	1647.99	1647.51	1646.21
28	1644.83	1646.21	1644.67	1641.27	1637.35	1634.55	1647.60	1648.33	1650.10	1647.97	1647.45	1646.24
29	1646.47	1646.34	1644.50	1641.15	---	1634.64	1648.17	1648.42	1650.00	1648.01	1647.45	1646.21
30	1647.03	1646.34	1644.36	1640.93	---	1634.66	1648.52	1648.53	1650.14	1647.98	1647.47	1646.14
31	1647.13	---	1644.19	1640.76	---	1634.70	---	1648.69	---	1647.97	1647.49	---
MEAN	1645.07	1645.89	1645.87	1642.74	1639.16	1635.53	1639.99	1648.86	1650.11	1648.86	1647.69	1646.93
MAX	1647.30	1647.19	1646.73	1644.04	1640.69	1637.23	1648.52	1649.51	1650.52	1650.15	1647.96	1647.52
MIN	1643.11	1644.72	1644.19	1640.76	1637.35	1634.47	1634.99	1648.25	1648.85	1647.97	1647.40	1646.14
*	3.933	3.796	3.407	2.848	2.295	1.945	4.192	4.210	4.440	4.053	3.967	3.744
**	-12.7	-52.9	-130.7	-208.7	-228.6	-130.7	+866.9	+6.71	+88.7	-144.5	-32.1	-86.0

CAL YR 1981 MEAN 1645.67 MAX 1649.47 MIN 1636.81 ** +5.33
WTR YR 1982 MEAN 1644.76 MAX 1650.52 MIN 1634.47 ** -7.07

* Contents, in billions of cubic feet, at 2400 hours on last day of month, by interpolation.
** Change in contents, equivalent in cubic feet per second.

01315000 INDIAN RIVER NEAR INDIAN LAKE, NY

LOCATION.--Lat 43°45'30", long 74°16'05", Hamilton County, Hydrologic Unit 02020001, on right bank 0.8 mi (1.3 km) downstream from Indian Lake Dam, 1.0 mi (1.6 km) upstream from Big Brook, and 2.0 mi (3.2 km) south of village of Indian Lake.

DRAINAGE AREA.--132 mi² (342 km²).

PERIOD OF RECORD.--July 1912 to June 1914, June 1915 to current year. Monthly discharge only for some periods published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 1,604.23 ft (488.969 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1916, nonrecording gage at same site and datum.

REMARKS.--Records excellent except for winter period, which are good. Flow regulated by Indian Lake (see station 01314500).

AVERAGE DISCHARGE.--68 years (1913, 1916-82), 295 ft³/s (8.354 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,460 ft³/s (98.0 m³/s) Mar. 28, 1913, gage height, 7.8 ft (2.38 m); minimum, less than 1 ft³/s (0.028 m³/s) frequently, when entire flow of river is being stored in Indian Lake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 718 ft³/s (20.3 m³/s) Oct. 2, gage height, 3.39 ft (1.03 m); minimum, 9.1 ft³/s (0.26 m³/s) Nov. 20, 30, Dec. 1, gage height, 0.50 ft (0.152 m), minimum daily, 10 ft³/s (0.28 m³/s), several days during period of shutdown in November and December.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	669	610	10	413	380	350	260	595	114	232	114	33
2	681	606	10	411	380	345	259	597	170	232	115	43
3	677	602	77	411	375	345	264	595	230	232	114	107
4	677	602	117	414	375	345	270	596	231	231	114	107
5	673	599	117	415	375	345	267	595	233	296	114	106
6	673	599	115	412	375	340	268	595	237	350	114	106
7	653	595	115	411	370	340	287	593	236	350	114	105
8	653	595	168	411	370	340	344	589	235	350	114	105
9	649	591	325	410	370	340	345	586	181	348	117	105
10	649	587	325	408	370	340	347	578	117	348	115	105
11	645	587	325	405	365	335	347	564	171	348	114	105
12	641	584	324	404	365	334	346	560	233	347	114	105
13	641	584	323	405	365	334	347	550	232	346	116	105
14	637	580	322	403	365	333	347	540	232	320	115	105
15	633	580	322	400	360	332	350	530	232	237	114	178
16	629	232	322	400	360	331	354	520	232	237	114	177
17	629	10	322	400	360	331	371	460	233	236	114	189
18	626	10	321	400	360	330	387	410	232	236	114	225
19	622	10	320	400	355	329	384	410	232	206	114	223
20	622	12	319	395	355	328	394	400	232	114	114	223
21	618	12	319	395	355	327	449	370	232	114	114	223
22	614	11	318	395	355	325	540	340	231	113	114	222
23	614	11	344	390	355	325	562	340	233	113	114	223
24	614	10	421	390	360	324	569	340	232	114	114	222
25	499	10	420	390	360	324	578	340	232	113	116	221
26	14	10	419	390	355	307	587	340	232	113	114	220
27	282	11	418	385	355	251	599	291	231	114	99	222
28	641	11	417	385	350	251	604	112	230	114	33	221
29	626	10	416	385	---	251	604	114	233	114	33	220
30	618	10	415	380	---	251	601	113	232	114	33	220
31	614	---	414	380	---	255	---	114	---	114	33	---
TOTAL	18733	9281	8920	12393	10195	9938	12231	13677	6563	6846	3205	4771
MEAN	604	309	288	400	364	321	408	441	219	221	103	159
MAX	681	610	421	415	380	350	604	597	237	350	117	225
MIN	14	10	10	380	350	251	259	112	114	113	33	33
ADJUSTED FOR CHANGE IN CONTENTS OF INDIAN LAKE												
MEAN	591	256	157	191	135	190	1275	448	308	77	71	73
CFSM	4.48	1.94	1.19	1.45	1.02	1.44	9.66	3.39	2.33	.58	.54	.55
IN	5.16	2.16	1.37	1.67	1.06	1.66	10.78	3.91	2.60	.67	.62	.62

ADJUSTED

CAL YR 1981 TOTAL 98833 MEAN 271 MAX 681 MIN 10 MEAN 276 CFSM 2.09
WTR YR 1982 TOTAL 116753 MEAN 320 MAX 681 MIN 10 MEAN 313 CFSM 2.37

01315500 HUDSON RIVER AT NORTH CREEK, NY

LOCATION.--Lat 43°42'03", long 73°59'02", Warren County, Hydrologic Unit 02020001, on left bank 125 ft (38 m) upstream from bridge on State Highway 28N in village of North Creek, 500 ft (152 m) upstream from North Creek, and 26 mi (42 km) downstream from Indian Lake.

DRAINAGE AREA.--792 mi^2 (2,051 km^2).

PERIOD OF RECORD.--September 1907 to current year.

REVISED RECORDS.--WSP 621: Drainage area. WSP 1432: 1908-18, 1920, 1922. WDR NY-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 987.51 ft (300.993 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1930, nonrecording gages at sites 80 ft (24 m) and 125 ft (38 m) downstream at same datum.

REMARKS.--Records good except those for winter periods and periods of no gage-height record, June 23 to Aug. 4, which are fair. Appreciable regulation by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--75 years, 1,557 ft^3/s (44.09 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,900 ft^3/s (818 m^3/s) Dec. 31, 1948, gage height, 12.14 ft (3.700 m); minimum, 112 ft^3/s (3.17 m^3/s) July 26, 1934, gage height, 1.96 ft (0.597 m); minimum daily, 114 ft^3/s (3.23 m^3/s) July 26, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,400 ft^3/s (521 m^3/s) Apr. 18, gage height, 10.23 ft (3.118 m); minimum, 262 ft^3/s (7.42 m^3/s) July 27, 28, gage height 2.29 ft (0.698 m); minimum daily, 265 ft^3/s (7.50 m^3/s), July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	4000	821	840	800	740	3110	4590	1040	1340	329	346
2	1950	3100	869	820	900	720	3510	4380	1620	1110	383	333
3	1880	2670	907	800	1100	720	3690	3980	3220	992	422	412
4	1870	2320	997	920	1300	700	4430	3570	3370	930	432	525
5	1810	2030	930	1390	1600	700	3980	3170	2720	838	412	561
6	1770	1930	872	1770	1600	700	3320	2970	2990	814	407	514
7	1980	2120	736	1820	1500	680	2730	2910	3720	790	402	458
8	2240	2060	915	1560	1400	680	2360	2770	3070	767	383	417
9	2450	1930	819	1390	1300	700	2050	3090	2380	745	447	383
10	2390	1800	888	1250	1300	720	1800	3240	1770	701	854	359
11	2120	1690	911	1180	1200	740	1650	3120	1360	666	1010	337
12	1820	1610	915	1100	1100	800	1560	2710	1220	638	790	324
13	1680	1470	943	1000	1000	900	1530	2330	1120	625	680	316
14	1560	1410	900	1000	1000	1070	1570	2160	1050	612	659	304
15	1510	1390	800	960	1000	1220	1970	1960	1010	453	612	333
16	1390	1280	780	920	960	1200	2770	1790	1000	463	549	491
17	1350	958	780	900	960	1000	5820	1660	992	453	485	612
18	1390	1010	760	860	940	960	16800	1430	1070	442	427	606
19	1550	1020	740	840	920	940	13100	1380	974	432	392	586
20	1870	1110	700	820	900	940	10400	1390	957	392	392	549
21	1830	1620	700	800	880	940	11200	1710	939	333	407	514
22	1690	1730	700	760	880	940	9160	1530	904	308	392	491
23	1660	1540	740	740	860	940	7000	1320	992	296	373	497
24	1950	1270	860	740	820	940	6270	1400	1310	284	364	638
25	1980	1140	1000	720	800	960	7850	1630	1390	277	383	838
26	1420	1090	920	720	780	1530	8360	1520	1260	273	508	854
27	3420	987	880	680	760	1610	8670	1360	1130	265	645	846
28	11300	1030	860	660	740	1420	7850	1080	992	280	619	1120
29	12400	994	860	640	---	1540	6370	1000	1000	308	497	1210
30	7650	924	860	640	---	1420	5190	965	1400	329	427	1080
31	5280	---	840	680	---	1590	---	896	---	333	378	---
TOTAL	87160	49233	26203	29920	29300	30660	166070	69011	47970	17489	15460	16854
MEAN	2812	1641	845	965	1046	989	5536	2226	1599	564	499	562
MAX	12400	4000	1000	1820	1600	1610	16800	4590	3720	1340	1010	1210
MIN	1350	924	700	640	740	680	1530	896	904	265	329	304

CAL YR 1981 TOTAL 553161 MEAN 1516 MAX 13900 MIN 287
WTR YR 1982 TOTAL 585330 MEAN 1604 MAX 16800 MIN 265

HUDSON RIVER BASIN

01318500 HUDSON RIVER AT HADLEY, NY

LOCATION.--Lat 43°19'08", long 73°50'41", Saratoga County, Hydrologic Unit 02020001, on right bank at Hadley, 400 ft (122 m) downstream from outlet of Lake Luzerne, and 0.3 mi (0.5 km) upstream from Sacandaga River.

DRAINAGE AREA.--1,664 mi² (4,310 km²).

PERIOD OF RECORD.--July 1921 to current year.

REVISED RECORDS.--WSP 561: 1921-22. WSP 756: Drainage area. WSP 1432: 1931 (m).

GAGE.--Water-stage recorder. Datum of gage is 563.99 ft (171.904 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are fair. Some diurnal fluctuation caused by powerplant on Schroon River. Flow regulated by Indian Lake (see station 01314500) and other reservoirs above station.

AVERAGE DISCHARGE.--61 years, 2,900 ft³/s (82.13 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,700 ft³/s (1,210 m³/s) Jan. 1, 1949, gage height, 21.21 ft (6.465 m), minimum, 281 ft³/s (7.96 m³/s) Sept. 3, 1934, gage height, 0.94 ft (0.287 m), minimum daily, 292 ft³/s (8.27 m³/s) July 24, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft³/s (420 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 29	0600	19,000	538	11.51	3.508	Apr. 27	1000	15,600	442	10.13	3.088
Apr. 18	1900	*26,800	759	*14.74	4.493						

Minimum discharge, 448 ft³/s (12.7 m³/s) Sept. 14, gage height, 1.48 ft (0.451 m); minimum daily, 460 ft³/s (13.0 m³/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3090	7680	1950	1500	1200	1300	7210	9090	1880	2710	571	576
2	2980	6430	2020	1400	1500	1300	8630	8440	2220	2220	576	545
3	2950	5660	2080	1400	1600	1300	8300	7770	3570	1950	657	536
4	2800	5060	2140	1500	2100	1300	10200	6920	4380	1800	663	613
5	2850	4590	2080	2850	2620	1200	9470	6160	3870	1640	663	737
6	2710	4270	1970	3160	2680	1300	8370	5680	4490	1550	618	756
7	2910	4430	1820	3320	2620	1300	7140	5260	5780	1500	608	693
8	3240	4300	1810	3050	2450	1300	6620	5000	5200	1430	597	629
9	3500	4030	1790	2590	2280	1300	5910	5000	4010	1330	646	581
10	3500	3760	1710	2380	2130	1200	5460	5200	3270	1270	803	540
11	3320	3540	1770	2110	2060	1200	4990	4910	2670	1190	1270	513
12	2970	3340	1770	2000	1990	1300	4820	4610	2330	1140	1210	500
13	2740	3110	1720	1840	1910	1400	4630	4030	2180	1090	1000	482
14	2550	2920	1700	1700	1850	1700	4870	3690	2180	1040	957	460
15	2420	2830	1600	1800	1790	1900	5580	3450	2040	1000	904	465
16	2340	2790	1600	1700	1730	2000	6540	3210	1960	911	845	522
17	2250	2400	1500	1600	1650	1900	9910	2970	1990	874	756	699
18	2200	2290	1400	1500	1670	1800	23000	2610	2110	824	675	737
19	2410	2190	1300	1500	1640	1850	23200	2330	1980	803	602	712
20	2670	2270	1200	1400	1610	1900	20000	2420	2070	769	571	675
21	2770	2970	1200	1500	1550	2000	20400	2610	1950	687	571	640
22	2620	3290	1300	1400	1500	2050	19100	2520	1830	597	566	597
23	2550	3090	1400	1300	1500	2100	15000	2340	1810	550	550	602
24	2920	2770	1600	1300	1450	2200	13500	2590	2020	518	545	640
25	3080	2470	1700	1400	1400	2500	13900	2920	2150	491	592	824
26	2830	2290	1700	1400	1400	3710	14600	2770	2080	478	663	987
27	4040	2250	1500	1300	1300	4830	15300	2510	1940	473	831	1000
28	13300	2260	1400	1300	1350	4150	14300	2220	1780	495	972	1110
29	17900	2250	1500	1300	---	4150	12300	1980	1790	550	874	1320
30	12800	2120	1500	1200	---	4190	10500	2020	3030	540	737	1310
31	9360	---	1500	1100	---	4720	---	1920	---	555	646	---
TOTAL	130570	103650	51230	54800	50530	66350	333750	125150	80560	32975	22739	21001
MEAN	4212	3455	1653	1768	1805	2140	11130	4037	2685	1064	734	700
MAX	17900	7680	2140	3320	2680	4830	23200	9090	5780	2710	1270	1320
MIN	2200	2120	1200	1100	1200	1200	4630	1920	1780	473	545	460

CAL YR 1981 TOTAL 995774 MEAN 2728 MAX 21700 MIN 484
WTR YR 1982 TOTAL 1073305 MEAN 2941 MAX 23200 MIN 460

01321000 SACANDAGA RIVER NEAR HOPE, NY

LOCATION.--Lat 43°21'10", long 74°16'15", Hamilton County, Hydrologic Unit 02020002, on left bank 1.5 mi (2.4 km) downstream from West Branch Sacandaga River, on State Highway 30, and 4.5 mi (7.2 km) upstream from Hope.

DRAINAGE AREA.--491 mi^2 (1,272 km^2).

PERIOD OF RECORD.--September 1911 to current year.

GAGE.--Water-stage recorder. Datum of gage is 881.31 ft (268.623 m) National Geodetic Vertical Datum of 1929. Prior to July 24, 1929, nonrecording gage at site 300 ft (91 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are fair. Some seasonal regulation at Piseco Lake Outlet and, since 1959, intermittent regulation by Lake Algonquin at Wells 4 mi (6 km) upstream. Infrequent minor fluctuations by mill upstream.

AVERAGE DISCHARGE.--71 years, 1,101 ft^3/s (31.18 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s (906 m^3/s) Mar. 27, 1913, gage height, 11.0 ft (3.35 m), from floodmarks at site then in use; minimum, about 16 ft^3/s (0.45 m^3/s) Sept. 30, 1913, gage height, 1.17 ft (0.357 m); minimum daily, 18 ft^3/s (0.51 m^3/s) Sept. 20, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,100 ft^3/s (258 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0900	*18,000	532	*8.67	2.643
Apr. 18	0830	15,600	442	8.07	2.406
Apr. 20	2300	10,300	292	6.88	2.097

Minimum discharge, 48 ft^3/s (1.36 m^3/s) Sept. 10, gage height, 1.30 ft (0.396 m); minimum daily, 51 ft^3/s (1.44 m^3/s) Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	851	2870	623	400	1000	400	4910	4220	1190	1420	119	75
2	819	2400	779	400	1100	400	4350	3680	1840*	1100	118	89
3	806	2030	838	500	1400	400	3730	3210	1680	912	185	104
4	744	1680	805	900	2500	400	4750	2670	1330	747	184	109
5	666	1380	750	2140	2000	400	4100	2480	1230	594	150	98
6	657	1610	671	1970	1500	400	3210	2200	2970	464	130	97
7	1140	1580	548	1710	1300	500	2460	1950	2990	418	122	100
8	1280	1430	650	1320	1200	700	2190	1730	2110	415	127	128
9	1190	1220	580	1170	1100	560	1640	1600	1730	365	267	103
10	1080	965	523	968	1000	500	1380	1470	1370	322	516	51
11	965	1040	509	900	940	520	1600	1300	1090	289	353	73
12	855	959	501	840	880	540	1490	1170	894	266	269	77
13	760	862	472	800	840	600	1470	1070	779	247	242	76
14	684	811	450	760	800	700	1930	961	795	222	224	75
15	622	772	430	720	760	900	2550	800	714	203	206	81
16	573	762	410	680	720	1000	3960	785	673	193	191	84
17	528	763	380	660	700	1100	6960	727	814	186	182	81
18	555	735	360	640	660	1000	12700	659	851	177	165	86
19	1100	695	350	620	620	1000	7680	613	724	180	150	93
20	1070	860	350	600	580	1000	7800	698	671	168	151	89
21	938	1580	450	600	560	1100	9780	682	635	134	166	87
22	850	1280	600	700	540	1100	7310	614	655	115	167	84
23	945	1200	1000	900	500	1200	5020	607	665	105	168	175
24	1400	1060	603	700	480	1400	6220	1050	703	97	159	180
25	1250	925	553	600	450	1560	7520	1250	602	90	127	149
26	1280	837	470	580	430	2240	7590	1080	484	87	145	126
27	7090	858	450	560	410	2380	8520	923	443	80	134	164
28	14200	871	420	560	400	2070	6910	793	403	100	105	240
29	7930	800	400	600	---	1910	5580	1100	1140	142	91	215
30	5130	709	400	660	---	1710	4610	1300	2440	129	81	180
31	3580	---	400	800	---	2330	---	1180	---	114	77	---
TOTAL	61538	35544	16725	25958	25370	32020	149920	44572	34615	10101	5471	3369
MEAN	1985	1185	540	837	906	1033	4997	1438	1154	326	176	112
MAX	14200	2870	1000	2140	2500	2380	12700	4220	2990	1420	516	240
MIN	528	695	350	400	400	400	1380	607	403	80	77	51

CAL YR 1981 TOTAL 377091 MEAN 1033 MAX 14200 MIN 70
WTR YR 1982 TOTAL 445203 MEAN 1220 MAX 14200 MIN 51

01323500 GREAT SACANDAGA LAKE AT CONKLINGVILLE, NY

LOCATION.--Lat 43°18'57", long 73°55'39", Saratoga County, Hydrologic Unit 02020002, 800 ft (244 m) upstream from right end of Conklingville Dam on Sacandaga River at Conklingville.

DRAINAGE AREA.--1,044 mi² (2,704 km²).

PERIOD OF RECORD.--January 1930 to current year. Prior to October 1969, published as "Sacandaga Reservoir at Conklingville."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to Apr. 23, 1930, nonrecording gage at same datum in outlet channel 800 ft (244 m) downstream.

REMARKS.--Reservoir is formed by earth and concrete dam; storage began in March 1930; dam completed in 1930. Usable capacity for stream regulation, 29,670 mil ft³ (840.3 hm³) between elevations 735.0 ft (224.03 m) and 768.0 ft (234.09 m). Between elevations 768.0 ft (234.09 m) and 771.0 ft (235.00 m) (spillway crest) an additional 3,450 mil ft³ (97.7 hm³) is available exclusively for flood storage. Elevation of inverts of three Dow valves is 699.0 ft (213.06 m). Capacity of 4,600 mil ft³ (130 hm³) below elevation 735.0 ft (224.03 m) is considered dead storage, except for extraordinary emergencies or for necessary inspection of structures. Purpose of reservoir is to provide flood control and low-water stream regulation for sanitary improvement, navigation, and power, as required by the public welfare, including public health and saftey. Area of water surface of reservoir filled to capacity, elevation, 771.0 ft (235.00 m), is 41.7 mi² (108 km²).

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 770.78 ft (234.934 m) June 26, 1972, contents, 37,470 mil ft³ (1,061 hm³); minimum since first filling, 729.55 ft (222.367 m) Mar. 30, 1940, contents, 2,100 mil ft³ (59.5 hm³).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 768.74 ft (234.312 m) June 8, contents, 35,110 mil ft³ (994 hm³); minimum, 742.01 ft (226.165 m) Mar. 26, contents, 9,280 mil ft³ (263 hm³).

Capacity table, current water year
(elevation, in feet, and contents, in billions of cubic feet)

738	6.43	760	25.61
740	7.80	764	29.85
745	11.64	768	34.27
750	15.94	771	37.72
755	20.11		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	759.02	764.27	762.31	757.84	753.79	748.22	744.00	767.47	767.81	767.16	762.90	758.78
2	758.98	764.57	762.18	757.56	753.53	747.91	745.20	767.50	767.90	767.03	762.80	758.65
3	758.93	764.63	762.08	757.67	753.40	747.55	745.96	767.52	767.95	766.73	762.67	758.52
4	758.98	764.59	761.92	757.67	753.40	747.21	747.15	767.54	767.91	766.64	762.51	758.32
5	758.93	764.51	761.78	757.82	753.42	746.87	748.15	767.61	767.85	766.72	762.32	758.16
6	758.88	764.51	761.74	757.94	753.49	746.50	748.88	767.63	768.18	766.71	762.16	758.10
7	758.98	764.51	761.62	758.04	753.53	746.34	749.45	767.66	768.63	766.56	761.99	757.92
8	758.94	764.50	761.41	758.06	753.52	746.05	749.86	767.68	768.72	766.38	761.88	757.77
9	758.92	764.46	761.29	758.00	753.35	745.66	750.21	767.69	768.62	766.20	761.89	757.62
10	758.91	764.31	761.11	757.96	753.18	745.29	750.52	767.77	768.46	766.02	761.91	757.41
11	758.94	764.25	760.91	757.85	752.95	744.92	750.82	767.76	768.24	765.93	761.77	757.17
12	758.97	764.08	760.72	757.66	752.70	744.56	751.14	767.74	768.01	765.96	761.60	757.06
13	758.92	763.96	760.61	757.43	752.45	744.24	751.44	767.65	767.88	765.73	761.47	756.97
14	758.82	763.80	760.50	757.24	752.33	744.18	751.85	767.55	767.73	765.57	761.35	756.81
15	758.71	763.71	760.30	757.08	752.08	743.94	752.37	767.48	767.62	765.41	761.27	756.53
16	758.62	763.69	760.21	756.87	751.78	743.70	753.05	767.44	767.56	765.25	761.22	756.43
17	758.51	763.56	759.98	756.73	751.50	743.50	754.17	767.47	767.53	765.13	761.09	756.17
18	758.50	763.42	759.73	756.58	751.24	743.24	756.34	767.39	767.58	765.05	760.90	755.98
19	758.62	763.26	759.55	756.35	750.99	742.95	758.07	767.37	767.55	765.00	760.76	755.82
20	758.56	763.11	759.42	756.15	750.73	742.75	759.57	767.31	767.61	764.78	760.59	755.70
21	758.48	763.18	759.27	755.90	750.56	742.71	760.77	767.18	767.61	764.63	760.36	755.52
22	758.42	763.25	759.06	755.66	750.30	742.69	762.04	767.11	767.56	764.44	760.28	755.26
23	758.43	763.23	758.94	755.48	750.01	742.48	762.99	767.10	767.50	764.23	760.21	755.15
24	758.48	763.08	758.80	755.39	749.71	742.23	763.47	767.27	767.38	764.08	760.05	754.98
25	758.53	762.96	758.71	755.19	749.41	742.08	764.34	767.40	767.26	763.96	759.90	754.75
26	758.63	762.82	758.65	754.94	749.08	742.14	765.21	767.46	767.11	763.86	759.72	754.63
27	759.16	762.76	758.59	754.70	748.75	742.36	766.00	767.45	767.05	763.65	759.54	754.59
28	761.07	762.66	758.52	754.46	748.52	742.55	766.64	767.45	767.02	763.49	759.36	754.49
29	762.78	762.56	758.36	754.21	---	742.59	767.09	767.49	766.92	763.40	759.22	754.32
30	763.43	762.49	758.15	753.95	---	742.74	767.27	767.64	767.16	763.18	759.14	754.18
31	763.86	---	757.93	753.79	---	743.05	---	767.77	---	763.00	758.86	---
MEAN	759.29	763.69	760.14	756.52	751.78	744.30	755.47	767.50	767.73	765.22	761.02	756.46
MAX	763.86	764.63	762.31	758.06	753.79	748.22	767.27	767.77	768.72	767.16	762.90	758.78
MIN	758.42	762.49	757.93	753.79	748.52	742.08	744.00	767.10	766.92	763.00	758.86	754.18
*	29.93	28.11	23.40	19.45	14.50	10.38	33.59	34.01	33.35	28.64	24.40	19.72
**	+1975	-702	-1759	+1475	-2046	-1538	+8954	+157	-255	-1759	-1583	-1806

CAL YR 1981 MEAN 760.62 MAX 768.76 MIN 746.76 ** +203
WTR YR 1982 MEAN 759.13 MAX 768.72 MIN 742.08 ** -156

* Contents, in billions of cubic feet, at 2400 hours on last day of month.
** Change in contents, equivalent in cubic feet per second.

01325000 SACANDAGA RIVER AT STEWARTS BRIDGE, NEAR HADLEY, NY

LOCATION.--Lat 43°18'41", long 73°52'04", Saratoga County, Hydrologic Unit 02020002, on left bank 1.0 mi (1.6 km) downstream from Stewarts Bridge, 1.1 mi (1.8 km) west of Hadley, 1.4 mi (2.3 km) upstream from mouth, and 1.5 mi (2.4 km) downstream from Stewarts Bridge hydroelectric plant.

DRAINAGE AREA.--1,055 mi^2 (2,732 km^2).

PERIOD OF RECORD.--September 1907 to current year. Published as "near Hadley" 1907-1910, "at Hadley" 1911-32 and "at Conklingville" 1932-52. Records published for both sites October 1951 to September 1952.

REVISED RECORDS.--WSP 1302: 1908. WSP 1432: 1910-12, 1916-21.

GAGE.--Water-stage recorder. Datum of gage is 582.00 ft (177.394 m) National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1911, nonrecording gage at site about 1 mi (2 km) upstream at different datum. Jan. 1, 1911 to Sept. 30, 1932, water-stage recorder at site 0.8 mi (1.3 km) downstream at datum 8.82 ft (2.688 m) lower than present datum. Oct. 1, 1932 to Sept. 30, 1952, water-stage recorder at site 3.6 mi (5.8 km) upstream at datum 85.47 ft (26.051 m) higher than present datum.

REMARKS.--Records good above 10 ft^3/s (0.28 m^3/s) and fair below. Flow regulated by Great Sacandaga Lake since Mar. 27, 1930 (see station 01323500); no discharge over spillway during year. Extensive diurnal fluctuation caused by release of water from Great Sacandaga Lake, through Elmer J. West hydroelectric station as directed by Board of Hudson River-Black River Regulating District, and through Stewarts Bridge hydroelectric station.

COOPERATION.--From Oct. 1, 1932, to Dec. 4, 1979 discharge computed by Board of Hudson River-Black River Regulating District from rating developed by Geological Survey. Since Dec. 4, 1979, discharge computed by U.S. Geological Survey.

AVERAGE DISCHARGE.--75 years, 2,142 ft^3/s (60.66 m^3/s), adjusted for storage since 1930.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 35,500 ft^3/s (1,010 m^3/s) Mar. 28, 1913, gage height, 12.36 ft (3.767 m) site and datum then in use; minimum, 5.3 ft^3/s (0.15 m^3/s) Mar. 17, 18, 1964, Apr. 29 to May 4, May 5, 6, 1965; minimum daily, 5.3 ft^3/s (0.15 m^3/s) Apr. 30 to May 3, 1965. Maximum discharge since construction of Conklingville Dam in 1930, 13,300 ft^3/s (377 m^3/s) July 1, 1968, gage height, 9.54 ft (2.908 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,620 ft^3/s (159 m^3/s) Feb. 4, June 8, gage height, 6.27 ft (1.911 m); minimum 9.3 ft^3/s (0.26 m^3/s) Apr. 10, 11; minimum daily, 9.9 ft^3/s (0.28 m^3/s) Apr. 9-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	27	3410	1650	3270	4190	1700	4820	2050	4070	55	2180
2	2330	2030	3410	2420	3550	4220	2420	4870	2360	4630	2310	2330
3	2060	2610	3350	1530	3540	4180	1990	4750	2350	4530	2390	2360
4	33	3120	3320	3240	3850	4140	130	3230	2560	87	2370	2350
5	2180	3370	3320	3100	3600	4270	23	3020	3060	28	2380	35
6	2190	3410	1640	3100	3570	4220	13	2610	3060	2950	2400	994
7	2390	3380	3230	3060	2330	2660	12	2510	3700	2980	2340	2360
8	2090	2500	3380	3090	3240	4300	11	2560	5430	3070	92	2350
9	2080	3030	3350	3020	4100	4260	9.9	39	4530	2640	2240	2380
10	2050	3610	3270	2220	4130	4210	9.9	2550	4890	2590	2210	2370
11	33	3050	3250	3160	4180	4210	9.9	2580	4970	38	2210	2360
12	2270	3310	3090	3580	4080	4190	9.9	2580	4140	2550	2110	36
13	2250	3340	1500	3510	4080	4190	11	2550	2890	2170	2010	2380
14	2250	3320	3170	3540	2560	2610	11	2730	4110	2220	2050	2580
15	2260	1400	3370	3520	4140	4190	11	2120	2660	2250	35	2550
16	2220	3200	3350	3520	4110	4220	12	38	2500	2260	2190	2580
17	2410	3320	3310	2170	4100	4240	21	2020	2160	2220	2160	2550
18	35	3350	3350	3390	4100	4160	27	2060	2210	53	2230	2550
19	2290	3350	3100	3480	4070	4180	15	2120	2170	2350	2240	34
20	2190	3380	1530	3480	4080	4190	14	2090	37	2390	2170	2520
21	1960	3320	3200	3570	2550	2590	16	2100	2170	2400	2160	2570
22	2090	1260	3320	3600	4080	3020	13	2110	2500	2410	48	2550
23	2190	3310	3390	3540	4100	4130	12	35	2530	2380	2130	2570
24	2210	3310	3310	2360	4100	4080	34	2080	2660	2380	2310	2550
25	1010	3300	1530	3240	4180	4100	60	2100	2720	53	2340	2440
26	2240	3100	2060	3480	4220	4080	2820	1730	2710	2430	2320	38
27	2800	3280	1470	3570	4190	4100	4050	1690	51	2440	2160	2180
28	4160	3370	3250	3540	2640	2560	4380	1720	2700	2390	2190	2030
29	3070	1270	3370	3570	---	4130	4650	1860	2730	2380	35	2020
30	2360	3230	3350	3550	---	1990	4780	56	2800	2350	1980	2040
31	37	---	3310	2350	---	2150	---	1530	---	2360	2180	---
TOTAL	62018	86857	92260	96150	104740	117960	27275.6	68858	85408	70049	58045	60837
MEAN	2001	2895	2976	3102	3741	3805	909	2221	2847	2260	1872	2028
MAX	4160	3610	3410	3600	4220	4300	4780	4870	5430	4630	2400	2580
MIN	33	27	1470	1530	2330	1990	9.9	35	37	28	35	34

Adjusted for change in contents in Great Sacandaga Lake and Stewarts Bridge Pool

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3975	2195	1217	1628	1694	2222	9910	2379	2589	503	290	222
CFSM	3.77	2.08	1.15	1.54	1.61	2.11	9.39	2.25	2.45	.48	.27	.21
IN	4.35	2.32	1.33	1.78	1.68	2.43	10.48	2.59	2.73	.55	.31	.23

			Observed							Adjusted				
CAL YR 1981	TOTAL	686840.5	MEAN	1882	MAX	8000	MIN	6.8	MEAN	2084	CFSM	1.98	IN	26.82
WTR YR 1982	TOTAL	930457.6	MEAN	2549	MAX	5430	MIN	9.9	MEAN	2393	CFSM	2.27	IN	30.78

01327750 HUDSON RIVER AT FORT EDWARD, NY

LOCATION.--Lat 43°16'10", long 73°35'47", Washington County, Hydrologic Unit 02020003, on left bank 40 ft (12 m) upstream from Scott Paper Mill, 150 ft (46 m) south of River Street in Fort Edward, and 0.4 mi (0.6 km) upstream from bridge on State Highway 197.

DRAINAGE AREA.--2,817 mi^2 (7,296 km^2).

PERIOD OF RECORD.--December 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft (30.480 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated appreciably by Great Sacandaga Lake (see station 01323500) and Indian Lake (see station 01314500). Diurnal fluctuation caused by powerplants upstream from station. Water is diverted into St. Lawrence River basin through Glens Falls feeder, Bond Creek (see station 01328000), and Champlain (Barge) Canal, and occasionally may be received from that basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--5 years, 5,140 ft^3/s (145.6 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 34,000 ft^3/s (963 m^3/s) Apr. 29, 1979, gage height 28.09 ft (8.562 m); maximum gage height, 28.71 ft (8.751 m) Jan. 11, 1978, ice jam; minimum discharge, 400 ft^3/s (11.3 m^3/s) Sept. 4, 1978, gage height, 19.33 ft (5.892 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,800 ft^3/s (787 m^3/s) Apr. 19, gage height, 26.73 ft (8.140 m), minimum discharge, 916 ft^3/s (25.9 m^3/s) Sept. 26, gage height, 20.29 ft (6.180 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5630	7540	5000	3630	5000	5040	8490	15000	3570	5970	1300	2880
2	5480	7540	4420	3930	5400	5630	11200	14000	3930	6090	2210	2990
3	5150	8400	6250	3330	5800	5510	11100	13000	4930	6050	2780	2880
4	3570	8200	5370	4420	6400	5550	12100	10500	6570	3420	3050	2860
5	4160	8000	5080	5260	6600	5550	9690	9790	6650	1920	3130	1100
6	4290	7320	4690	6490	6600	5590	8960	8260	6860	3130	2730	1580
7	4620	7760	4690	6410	5800	4590	7850	7190	7940	4060	2700	2830
8	5000	7320	4970	6570	5630	5080	6770	7450	10500	4420	1180	3270
9	5510	6650	5040	4800	6400	5660	6600	6010	8670	3750	2620	2990
10	5370	7500	5000	5400	6800	5590	6000	5820	7370	3870	3100	2860
11	4620	6490	4930	5600	7200	5700	5400	7070	7370	1320	3540	2830
12	3930	6610	4620	5800	6400	5630	5200	6730	6490	3020	3390	1120
13	4900	6860	3750	5600	6330	5820	4900	6250	5080	3420	3020	2420
14	4760	6410	4190	5600	5400	5180	5000	5930	5820	3050	2860	2880
15	4590	5040	4860	5600	5480	5510	5440	5630	5080	2970	1400	2910
16	4660	4190	5110	5600	6010	6570	6530	4250	4250	3080	2450	3130
17	4160	5510	4970	4500	6010	6690	8580	3890	4420	2970	2990	3220
18	2970	5590	4860	5200	5890	6530	21200	4450	4060	1190	2940	3190
19	3810	5550	4690	5200	5930	6370	25600	4250	4160	2750	2990	1470
20	4160	5550	3220	5200	5890	6610	22100	4220	2370	2730	2880	2600
21	4620	6050	3970	5400	5080	5820	21600	4390	3750	2910	2780	3190
22	4490	4030	4220	5200	5000	5480	21600	4860	3900	2910	1320	2940
23	4900	6010	5260	5200	5370	6330	17400	3360	3870	2700	2470	2990
24	4970	6410	5330	4500	5630	6900	15200	3570	3780	2730	2970	3130
25	4760	6210	3780	5000	5700	7020	15000	4620	4620	1440	2860	3190
26	4550	5290	3750	5000	5890	7760	17900	4760	4590	2160	3020	1230
27	5480	5290	3050	5000	5820	9000	21100	4420	2670	2570	3020	2860
28	15400	5400	4520	5000	4690	7940	20500	3810	3780	2700	3130	3240
29	22300	4550	4860	5000	---	7540	18900	3480	4120	2780	1340	3220
30	17700	4790	4970	5000	---	7720	17200	2500	5220	2780	2970	3270
31	11200	---	5080	4100	---	7150	---	3540	---	3050	2970	---
TOTAL	191710	188060	144500	158540	164150	193060	385110	193000	156390	97910	82110	81270
MEAN	6184	6269	4661	5114	5863	6228	12840	6226	5213	3158	2649	2709
MAX	22300	8400	6250	6570	7200	9000	25600	15000	10500	6090	3540	3270
MIN	2970	4030	3050	3330	4690	4590	4900	2500	2370	1190	1180	1100

CAL YR 1981 TOTAL 1680904 MEAN 4605 MAX 23000 MIN 916
WTR YR 1982 TOTAL 2035810 MEAN 5578 MAX 25600 MIN 1100

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY

LOCATION.--Lat 43°15'52", long 73°35'28", Saratoga-Washington Counties, Hydrologic Unit 02020003, at bridges on State Highway 197 over Rogers Island in Fort Edward, 0.4 mi (0.6 km) downstream from discharge station (01327750, Hudson River at Fort Edward), and 0.6 mi (1.0 km) upstream from Champlain Canal.

DRAINAGE AREA.--2,817 mi^2 (7,296 km^2), at gage.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (a), 1980 (b), 1981 (d), 1982 (e).
MINOR ELEMENT DATA: 1975 (b), 1976-77 (a), 1978-79 (e), 1980 (d).
PESTICIDE DATA: 1975, 1977 (a), 1978-79 (e), 1980 (a).
ORGANIC DATA: OC--1975 (a).
PCB--1975, 1977 (a), 1978-82 (e).
PCN--1977 (a), 1978-79 (e), 1980 (a).
NUTRIENT DATA: 1975-77 (a), 1978 (e).
SEDIMENT DATA: 1975 (b), 1980-82 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1978 to September 1979.

REMARKS.--Water-discharge data is that for Hudson River at Fort Edward (station 01327750). Supplemental samples collected from navigation canal (east channel) are designated by the value 40 for sample source code. Composite samples from both the main (west) channel and the navigation canal are designated by the value 7 for sample source code.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE SOURCE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							
29...	1015	--	21000	--	.10	23	1300
29...	1030	40	21000	--	.10	23	1300
30...	0930	--	17900	--	.10	11	532
30...	0945	40	17900	--	.10	11	532
DEC							
02...	1145	--	4930	--	<.10	2	27
02...	1200	40	4930	--	<.10	1	13
18...	0800	--	4000	--	<.10	3	32
18...	0815	40	4000	--	.00	4	43
JAN							
05...	0945	--	5150	--	<.10	3	42
05...	1000	40	5150	--	<.10	4	56
MAR							
12...	0945	--	5180	--	--	2	28
12...	1000	40	5180	--	--	1	14
12...	1005	7	5180	--	<.10	--	--
26...	1145	--	7020	91	<.10	12	227
26...	1200	40	7020	91	.30	5	95
26...	1745	--	8160	87	<.10	3	66
26...	1800	40	8160	87	<.10	6	132
27...	1130	--	9100	--	<.10	2	49
27...	1145	40	9100	--	.10	2	49
APR							
02...	1045	40	9390	76	<.10	4	101
02...	1115	--	9390	79	<.10	6	152
04...	0930	40	12800	69	<.10	5	173
04...	0945	--	12800	68	<.10	12	415
18...	0800	40	18200	62	.10	15	737
18...	0815	--	18200	59	<.10	21	1030
18...	1500	40	25500	55	.40	53	3650
18...	1515	--	25500	55	<.10	41	2820
18...	1645	40	26000	54	.30	41	2880
18...	1700	--	26000	55	.20	47	3300
19...	0015	--	27700	45	.10	48	3590
19...	0030	40	27700	47	.30	93	6960
19...	1300	40	25100	45	.30	33	2240
19...	1315	--	25100	44	.10	40	2710
19...	1700	40	24500	44	--	24	1590
19...	1715	--	24500	--	<.10	24	1590
20...	1015	40	22500	47	.10	15	911

01327755 HUDSON RIVER AT ROGERS ISLAND AT FORT EDWARD, NY--Continued

WATER QUALITY DATA. WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE SOURCE	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR								
20...	1030	--	22500	46	--	.10	14	850
22...	0900	--	22200	--	--	.10	9	539
22...	0915	40	22200	--	--	.10	11	659
28...	1015	40	20500	50	--	<.10	8	443
28...	1030	--	20500	50	--	.30	5	277
MAY								
17...	1315	7	4760	--	--	.10	3	39
JUN								
02...	1100	7	3840	109	7.2	.10	3	31
14...	1000	--	5860	--	--	--	2	32
14...	1015	40	5860	--	--	--	2	32
14...	1020	7	5860	73	7.2	.10	--	--
22...	1400	--	4900	--	--	--	1	13
22...	1415	40	4900	--	--	--	1	13
22...	1420	7	4900	80	7.1	.10	--	--
JUL								
13...	1515	--	3870	--	--	--	1	10
13...	1520	40	3870	--	--	--	1	10
13...	1525	7	3870	84	7.5	<.10	--	--
22...	1130	--	2670	--	--	--	3	22
22...	1145	40	2670	--	--	--	2	14
22...	1150	7	2670	97	7.3	.10	--	--
AUG								
02...	1115	--	2570	--	--	--	2	14
02...	1130	40	2570	--	--	--	2	14
02...	1135	7	2570	100	7.5	.10	--	--
09...	1300	40	2350	108	7.4	.10	3	19
09...	1330	--	2350	100	7.5	.10	5	32
15...	1430	--	1180	118	7.7	<.10	3	9.6
15...	1445	40	1180	118	7.7	.20	4	13
23...	1500	--	2620	--	--	--	5	35
23...	1530	40	2620	--	--	--	4	28
23...	1535	7	2620	105	7.2	<.10	--	--
SEP								
01...	1015	--	2970	--	--	--	2	16
01...	1030	40	2970	--	--	--	1	8.0
01...	1035	7	2970	96	7.3	.10	--	--
06...	1430	--	3050	131	7.3	.10	5	41
06...	1445	40	3050	136	7.3	.20	9	74
15...	1230	40	3160	--	--	--	2	17
15...	1300	--	3160	--	--	--	3	26
15...	1305	7	3160	102	7.3	.10	--	--
30...	0900	--	3630	--	--	--	5	49
30...	0915	40	3630	--	--	--	2	20
30...	0920	7	3630	121	8.5	<.10	--	--

01328000 BOND CREEK AT DUNHAM BASIN, NY

LOCATION.--Lat 43°18'22", long 73°32'56", Washington County, Hydrologic Unit 02020003, on left bank at Dunham Basin, 800 ft (244 m) upstream from bridge on State Highway 196, 0.2 mi (0.3 km) upstream from Glens Falls feeder and abandoned Champlain Canal, 0.5 mi (0.8 km) upstream from Champlain (Barge) Canal, and 1.9 mi (3.1 km) east of courthouse at Hudson Falls.

DRAINAGE AREA.--14.7 mi² (38.1 km²).

PERIOD OF RECORD.--June 1947 to September 1982 (discontinued). Prior to October 1950, published as "Bond Brook at Dunham Basin."

GAGE.--Water-stage recorder. Datum of gage is 140.30 ft (42.763 m) Barge Canal datum.

REMARKS.--Records fair except those during winter, which are poor. During canal navigation season, an indeterminate portion of flow is diverted at a point 0.5 mi (0.8 km) below gage into Lake Champlain basin through summit level of Champlain (Barge) Canal at Dunham Basin.

AVERAGE DISCHARGE.--35 years, 17.8 ft³/s (0.504 m³/s), 16.44 in/yr (418 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft³/s (38.8 m³/s) Dec. 31, 1948, gage height, 8.52 ft (2.597 m); maximum gage height, 8.66 ft (2.640 m) Mar. 5, 1964 (backwater from ice); minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 1, 2, 1965, Aug. 25, Sept. 19, 20, 1968, Sept. 12, 13, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Oct. 28	0915	*595	16.9	*5.78	1.762	Apr. 1	0115	468	13.3	5.09	1.551
Mar. 26	1600	431	12.2	4.91	1.497	Apr. 3	2145	519	14.7	5.35	1.631

Minimum discharge, 0.92 ft³/s (0.026 m³/s) July 27, Aug. 21, 22, gage height, 1.54 ft (0.469 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	25	8.6	18	10	6.8	383	8.6	5.2	13	4.9	1.4
2	12	20	40	21	20	6.6	157	7.6	9.0	9.0	2.4	1.9
3	69	17	35	25	45	6.4	202	7.2	8.6	8.1	1.7	1.7
4	25	15	22	60	90	6.4	237	6.8	5.2	5.5	1.5	1.4
5	13	13	16	100	70	6.4	76	5.9	5.9	3.3	1.4	1.4
6	11	34	13	70	50	6.4	63	5.5	40	2.8	1.4	1.2
7	24	33	11	45	40	6.4	54	5.5	50	3.6	1.4	1.2
8	16	18	10	35	30	6.4	32	4.9	23	2.1	2.1	1.2
9	12	14	9.5	28	20	6.6	36	5.2	10	1.9	13	1.2
10	9.5	13	9.0	23	15	7.0	49	5.5	6.8	1.7	13	1.4
11	7.2	12	8.6	19	13	10	50	4.9	5.2	1.9	4.9	1.2
12	5.5	9.5	8.6	15	12	25	45	3.9	4.9	3.1	2.1	1.2
13	4.9	8.1	8.1	11	10	60	43	4.5	4.9	2.4	1.7	1.4
14	4.2	7.6	7.6	9.0	10	120	48	3.9	8.6	2.4	1.7	1.4
15	4.2	8.6	7.6	8.0	13	70	36	3.6	7.2	2.1	2.1	1.4
16	3.9	11	8.1	7.0	17	45	32	3.6	5.2	2.1	2.8	1.7
17	3.3	10	8.6	6.0	15	40	32	3.6	22	2.4	1.4	1.5
18	3.9	12	8.6	5.4	14	37	56	4.2	19	2.4	1.4	1.4
19	13	14	7.6	5.0	15	35	30	4.5	8.1	1.5	1.4	1.5
20	9.5	27	7.6	4.7	17	35	21	7.6	9.0	1.5	1.2	1.4
21	8.1	52	9.0	4.5	20	35	19	6.3	7.2	1.5	1.1	1.2
22	4.9	28	9.5	4.3	15	40	15	4.5	5.5	1.5	1.1	1.2
23	24	17	23	4.2	12	50	13	4.5	16	1.4	1.2	1.7
24	92	14	45	4.1	10	90	11	29	15	1.4	1.2	1.5
25	26	12	34	4.0	9.0	200	11	26	7.2	1.4	1.4	1.5
26	30	10	26	4.0	8.0	346	10	12	5.9	1.1	1.4	1.4
27	253	13	20	4.0	7.4	222	25	8.1	5.9	1.1	1.4	1.7
28	348	17	19	4.0	7.0	116	16	5.9	4.9	1.7	1.4	1.7
29	96	13	18	4.0	---	109	11	5.9	12	2.1	1.2	1.9
30	53	10	17	4.5	---	187	9.5	6.8	34	1.7	1.2	1.5
31	34	---	17	6.0	---	254	---	5.5	---	3.3	1.4	---
TOTAL	1227.7	507.8	492.6	562.7	614.4	2191.4	1822.5	221.5	371.4	91.0	77.5	43.4
MEAN	39.6	16.9	15.9	18.2	21.9	70.7	60.8	7.15	12.4	2.94	2.50	1.45
MAX	348	52	45	100	90	346	383	29	50	13	13	1.9
MIN	3.3	7.6	7.6	4.0	7.0	6.4	9.5	3.6	4.9	1.1	1.1	1.2
CFSM	2.69	1.15	1.08	1.24	1.49	4.81	4.14	.49	.84	.20	.17	.10
IN.	3.11	1.28	1.25	1.42	1.55	5.55	4.61	.56	.94	.23	.20	.11

CAL YR 1981 TOTAL 5687.28 MEAN 15.6 MAX 348 MIN .92 CFSM 1.06 IN 14.39
WTR YR 1982 TOTAL 8223.90 MEAN 22.5 MAX 383 MIN 1.1 CFSM 1.53 IN 20.81

01329000 BATTEN KILL AT ARLINGTON, VT

LOCATION.--Lat 43°04'38", long 73°09'26", Bennington County, Hydrologic Unit 02020003, on left bank 5 ft (1.5 m) upstream from bridge on Highway 313 at Arlington and 0.9 mi (1.4 km) downstream from Warm Brook.

DRAINAGE AREA.--152 mi^2 (394 km^2).

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 851: 1936 (maximum gage height). WSP 1302: 1929-34(M).

GAGE.--Water-stage recorder. Datum of gage is 596.68 ft (181.868 m), National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1941, nonrecording gage at downstream side of bridge at same datum.

REMARKS.--Records good except those for winter period, which are poor. Prior to 1949, diurnal fluctuation at low flow caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years, 339 ft^3/s (9.600 m^3/s), 30.29 in/yr (769 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft^3/s (314 m^3/s) Mar. 18, 1936, gage height, 11.3 ft (3.44 m), from floodmarks, present site, from rating curve extended above 6,100 ft^3/s (170 m^3/s) on basis of slope-area measurement at gage height 10.8 ft (3.29 m) and computation of peak flow over dam; minimum, 37 ft^3/s (1.05 m^3/s) Sept. 25, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3410 ft^3/s (97.6 m^3/s) Apr. 18 gage height 8.67 ft (2.643 m); No other peak above base of 2,200 ft^3/s (62 m^3/s); minimum discharge 62 ft^3/s (1.76 m^3/s) Sept. 15, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	416	225	200	160	170	1770	728	200	547	181	86
2	190	362	386	195	180	175	1610	659	342	357	135	91
3	461	346	381	190	280	165	1200	575	328	296	109	175
4	422	323	321	282	1040	157	1400	512	241	266	101	135
5	289	301	284	508	943	180	1170	454	286	232	113	99
6	242	448	268	386	673	200	798	414	1130	206	95	84
7	379	546	258	329	474	192	588	387	784	194	88	78
8	503	410	259	267	398	216	550	357	499	183	82	75
9	447	350	255	248	360	186	497	346	357	170	89	72
10	352	327	242	240	329	186	474	328	279	157	250	69
11	293	308	231	230	284	192	480	293	238	145	175	67
12	260	293	223	220	304	350	489	273	220	142	118	66
13	235	269	214	215	278	470	480	253	208	147	105	64
14	217	261	208	210	259	606	589	238	276	131	118	63
15	205	258	206	200	252	491	608	223	244	122	107	63
16	198	255	215	195	269	414	721	214	211	122	93	69
17	194	246	211	190	244	400	1410	206	372	120	86	69
18	212	280	206	190	231	375	3180	194	450	118	89	66
19	576	343	192	185	231	397	2160	220	293	122	89	64
20	398	339	193	180	226	394	1680	414	283	115	81	62
21	308	487	185	175	222	423	2000	276	260	122	88	66
22	267	442	180	175	222	464	1680	220	283	109	86	69
23	286	346	307	170	209	471	1110	214	466	101	81	79
24	623	301	396	170	203	469	1080	543	530	97	81	113
25	436	275	298	170	186	581	1350	552	331	93	86	84
26	427	264	257	170	183	1050	1540	350	276	89	95	75
27	1200	281	243	165	189	1000	1980	273	260	86	82	73
28	1160	300	239	165	180	673	1540	232	226	101	76	84
29	764	268	231	165	---	587	1020	223	561	155	73	78
30	551	245	215	165	---	547	789	238	1210	115	73	73
31	461	---	206	160	---	905	---	214	---	97	75	---
TOTAL	12726	9910	7735	6710	9009	13086	35943	10623	11644	5057	3200	2411
MEAN	411	330	250	216	322	422	1198	343	388	163	103	80.4
MAX	1200	546	396	508	1040	1050	3180	728	1210	547	250	175
MIN	170	245	180	160	160	157	474	194	200	86	73	62
CFSM	2.70	2.17	1.65	1.42	2.12	2.78	7.88	2.26	2.55	1.07	.68	.53
IN.	3.11	2.43	1.89	1.64	2.20	3.20	8.80	2.60	2.85	1.24	.78	.59

CAL YR 1981 TOTAL 114587 MEAN 314 MAX 2660 MIN 86 CFSM 2.07 IN 28.04
WTR YR 1982 TOTAL 128054 MEAN 351 MAX 3180 MIN 62 CFSM 2.31 IN 31.34

HUDSON RIVER BASIN

01329650 HUDSON RIVER AT SCHUYLERVILLE, NY

LOCATION.--Lat 43°05'54", long 73°34'25", at Saratoga-Washington County line, Hydrologic Unit 02020003, at bridge on State Highway 29, 0.2 mi (0.3 km) east of Schuylerville, 0.8 mi (1.3 km) downstream from Batten Kill, and 1.0 mi (1.6 km) downstream from Champlain (Barge) Canal lock 5.

DRAINAGE AREA.--3,440 mi^2 (8,910 km^2) approximately.

PERIOD OF RECORD.--Water years 1977 to current year.
CHEMICAL DATA: 1980 (b), 1981 (c), 1982 (e).
MINOR ELEMENTS DATA: 1977 (e), 1978-79 (d), 1980 (b).
PESTICIDE DATA: 1977 (e), 1978-79 (d).
ORGANIC DATA: PCB--1977 (e), 1978-80 (d), 1981-82 (e).
PCN--1977 (e), 1978-79 (d).
NUTRIENT DATA: 1977 (e), 1978 (d).
SEDIMENT DATA: 1980 (d), 1981 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to September 1979.

REMARKS.--Water discharge estimated from wire-weight gage located at bridge. Streamflow affected by regulation for power generation and diversion for canal operations.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							
29...	1100	22800	--	--	1.9	38	2340
30...	1030	20600	--	--	.20	11	612
DEC							
02...	1100	6870	--	--	<.10	4	74
18...	0945	5130	--	--	<.10	5	69
JAN							
05...	1100	9870	--	--	<.10	16	426
MAR							
12...	1115	6730	--	--	<.10	2	36
26...	1045	14400	119	--	.10	40	1560
26...	1345	14600	--	--	<.10	98	3860
26...	1910	15600	120	--	<.10	98	4130
27...	1315	15100	--	--	<.10	--	--
APR							
02...	1200	16200	97	--	.10	33	1440
04...	1015	18800	99	--	.10	58	2940
18...	0845	17400	80	--	.30	34	1600
18...	1415	24600	69	--	.60	124	8240
18...	1745	25600	66	--	<.10	129	8920
19...	0115	29000	59	--	.50	95	7440
19...	1100	29600	53	--	.20	57	4560
19...	1415	28000	53	--	.30	45	3400
19...	1800	27800	54	--	.20	42	3150
20...	1145	24400	58	--	.10	23	1520
22...	1000	23400	--	--	.20	14	885
28...	1115	20700	56	--	.10	14	782
MAY							
17...	1315	4180	--	--	.10	3	34
JUN							
02...	1200	3790	116	7.6	.10	5	51
14...	1100	7180	91	7.3	<.10	3	58
22...	1500	5670	104	7.5	<.10	4	61
JUL							
13...	1600	3920	120	7.5	.20	2	21
22...	1300	3100	116	7.4	.10	3	25
AUG							
02...	1245	1450	120	7.9	.30	3	12
09...	1215	2260	114	7.6	.20	4	24
15...	1545	1680	130	7.9	.10	3	14
23...	1600	1860	119	7.6	.10	4	20
SEP							
01...	1145	2570	113	7.6	.20	3	21
06...	1545	E1000	132	7.8	.10	3	E8
15...	1345	2170	114	7.5	.10	7	41
30...	1030	3660	91	7.4	.10	3	30

E Estimate

01330500 KAYADEROSSERAS CREEK NEAR WEST MILTON, NY

LOCATION.--Lat 43°02'18", long 73°54'35", Saratoga County, Hydrologic Unit 02020003, on left bank 600 ft (183 m) downstream from Glowegee Creek, 1.0 mi (1.6 km) east of West Milton, and 3.5 mi (5.6 km) northwest of Ballston Spa.

DRAINAGE AREA.--90.0 mi² (233.4 km²).

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 1202: 1935-40.

GAGE.--Water-stage recorder. Datum of gage is 376.06 ft (114.623 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for the winter periods and those above 650 ft³/s (18 m³/s), which are poor. Slight occasional diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--55 years, 136 ft³/s (3.852 m³/s), 20.52 in/yr (521 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft³/s (133 m³/s) Mar. 18, 1936, gage height, 10.78 ft (3.286 m), from floodmarks; maximum gage height, 11.20 ft (3.414 m) Mar. 14, 1977, from floodmarks, minimum discharge, 6.1 ft³/s (0.17 m³/s) Aug. 23, 1927, gage height, 0.86 ft (0.262 m); minimum daily, 12 ft³/s (0.34 m³/s) Aug. 5-9, Sept. 8, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,130 ft³/s (32.0 m³/s) June 6, gage height 5.03 ft (1.533 m), no peak above base of 1,200 ft³/s (34 m³/s), minimum, 20 ft³/s (0.57 m³/s) Sept. 14, 15, gage height 1.28 ft (0.390 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	147	80	84	90	76	800	169	132	156	35	31
2	79	132	74	110	110	76	700	156	221	109	35	34
3	98	118	182	200	180	76	640	149	165	88	46	39
4	80	107	138	400	700	76	700	144	122	80	38	35
5	67	100	116	435	450	76	541	132	192	70	32	29
6	65	162	103	270	270	76	383	126	933	65	31	26
7	130	202	88	210	210	76	321	124	561	62	30	25
8	112	151	86	170	180	76	298	118	321	62	27	24
9	82	124	84	150	160	78	259	116	208	58	107	25
10	71	105	80	140	140	78	272	120	151	52	301	22
11	63	98	76	130	120	80	307	109	128	49	110	22
12	59	91	74	120	110	90	318	103	116	52	69	22
13	55	83	72	110	100	110	330	100	118	49	55	22
14	52	80	70	100	96	150	409	93	236	43	51	22
15	56	82	68	94	90	130	451	88	165	41	48	24
16	52	82	68	90	88	120	473	82	130	42	38	32
17	52	83	70	86	86	110	590	80	377	41	35	28
18	49	90	76	84	86	120	1000	74	301	39	35	23
19	109	86	90	84	84	140	623	96	172	40	32	24
20	91	128	180	82	84	170	482	182	140	39	34	23
21	74	233	227	82	82	200	454	120	128	40	37	25
22	66	167	165	82	82	230	368	88	138	36	33	25
23	71	126	189	82	80	270	288	103	298	37	32	43
24	160	107	213	80	80	320	259	415	182	31	32	55
25	122	95	156	80	80	409	238	368	128	31	35	38
26	136	86	120	80	78	688	230	202	110	31	41	34
27	521	100	100	80	78	528	423	140	105	31	35	41
28	668	110	88	80	76	374	313	112	91	37	33	51
29	429	96	80	80	---	313	221	165	122	57	29	41
30	250	90	76	80	---	330	189	184	301	41	30	35
31	177	---	76	82	---	615	---	138	---	36	29	---
TOTAL	4161	3461	3365	4037	4070	6261	12880	4396	6492	1645	1555	920
MEAN	134	115	109	130	145	202	429	142	216	53.1	50.2	30.7
MAX	668	233	227	435	700	688	1000	415	933	156	301	55
MIN	49	80	68	80	76	76	189	74	91	31	27	22
CFSM	1.49	1.28	1.21	1.44	1.61	2.24	4.77	1.58	2.40	.59	.56	.34
IN.	1.72	1.43	1.39	1.67	1.68	2.59	5.32	1.82	2.68	.68	.64	.38

CAL YR 1981 TOTAL 43638 MEAN 120 MAX 2000 MIN 18 CFSM 1.33 IN 18.04
WTR YR 1982 TOTAL 53243 MEAN 146 MAX 1000 MIN 22 CFSM 1.62 IN 22.01

NOTE.--No gage-height record Jan. 13 to Feb. 16.

01331095 HUDSON RIVER AT STILLWATER, NY

LOCATION.--Lat 42°56'16", long 73°39'04" at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on Stillwater Bridge Road in Stillwater, 0.4 mi (0.6 km) upstream from Champlain (Barge) Canal lock 4, and 0.9 mi (1.4 km) upstream from Hoosic River.

DRAINAGE AREA.--3,773 mi^2 (9,772 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 78.99 ft (24.076 m) National Geodetic Vertical Datum of 1929. Prior to January 1978, nonrecording gage in upper pool of Champlain (Barge) Canal lock 4, at Barge Canal datum.

REMARKS.--Water stage records are good above 3,000 ft^3/s (85.0 m^3/s) and fair below 3,000 ft^3/s (85.0 m^3/s). Streamflow affected by regulation for power generation and diversion for canal operations.

AVERAGE DISCHARGE.--5 years, 6,340 ft^3/s (179.5 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,100 ft^3/s (1,249 m^3/s) Mar. 15, 1977, gage height, 10.50 ft (3.200 m); minimum daily, 960 ft^3/s (27.2 m^3/s) Sept. 1, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,100 ft^3/s (944 m^3/s) Apr. 19, gage height, 7.93 ft (2.417 m), minimum daily, 1,190 ft^3/s (33.7 m^3/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6360	10300	5770	4980	4590	5000	17700	16300	4600	7600	2280	2840
2	6190	9250	6610	5200	5140	5600	18500	15200	4900	7240	1880	3010
3	6540	9590	6970	4270	5710	5770	18300	14400	5850	7100	3010	3010
4	5650	9590	6930	5740	7350	5800	20200	12400	7170	5260	3190	3010
5	5070	9270	6340	9810	8830	5830	16600	11100	7880	2970	3420	2040
6	5370	8950	6070	8800	8820	5880	14600	9540	10200	3380	2920	1190
7	5760	9890	5570	8000	7930	5390	11600	8660	10900	4590	2840	2410
8	6160	9400	6180	7200	7050	5340	10300	8500	12900	5110	2080	3010
9	6640	9000	5950	6600	7340	5880	10400	7710	11500	4590	2240	3150
10	6360	9000	5800	6940	7730	5920	9790	6630	9320	4440	5000	2880
11	6020	8200	5610	5960	6970	6000	9200	8080	9160	2790	4690	2790
12	4860	8000	5250	6000	6910	6410	8430	7950	8400	2450	4040	2000
13	5510	8200	4830	5990	6830	7620	8190	7170	6620	4090	3560	1650
14	5530	8000	4740	5910	6210	8890	8470	6960	6890	3610	3290	2840
15	5420	6000	5040	5940	6050	8960	8450	6600	6550	3380	2790	2920
16	5230	5800	5660	6010	6400	9260	8990	5330	5420	3420	2080	3060
17	4770	6000	5540	5450	6640	9270	11600	4690	6290	3290	3060	3100
18	4200	6200	5460	4660	6690	8830	22400	5320	6620	2370	3100	3190
19	4450	6310	5410	5450	6570	8820	33700	5000	5580	2280	3060	2200
20	5410	6420	4500	5580	6550	9780	27900	5110	4440	3060	3010	2200
21	5450	7550	4230	5410	6130	9800	25400	5370	4390	3150	2920	2920
22	4980	6250	4740	5210	5740	9910	26100	5530	5480	3240	2080	3330
23	5660	6440	5640	5270	5970	11000	21600	5400	5580	3060	1770	3240
24	7560	7340	7090	5230	5970	11900	17700	4900	6070	2880	2880	3150
25	6750	7010	5720	4300	6120	12700	17000	5400	5640	2320	2790	3420
26	6310	6300	4940	4990	6200	16100	18500	5400	5960	1810	3010	2320
27	10000	6030	4530	5120	5600	16900	23300	5400	4690	2710	2970	2200
28	18100	6260	5030	5230	4200	13600	23300	5000	4190	2920	3060	3420
29	25600	5820	5660	5220	---	11700	21100	4500	5480	3100	2120	3380
30	22000	5290	5820	5110	---	12200	18400	3800	7310	3060	2120	3380
31	15600	---	5930	4680	---	12700	---	4200	---	3240	2920	---
TOTAL	239510	227660	173560	180260	182240	278760	507720	227550	205980	114510	90180	83260
MEAN	7726	7589	5599	5815	6509	8992	16920	7340	6866	3694	2909	2775
MAX	25600	10300	7090	9810	8830	16900	33700	16300	12900	7600	5000	3420
MIN	4200	5290	4230	4270	4200	5000	8190	3800	4190	1810	1770	1190

CAL YR 1981 TOTAL 2053490 MEAN 5626 MAX 31200 MIN 1470
WTR YR 1982 TOTAL 2511190 MEAN 6880 MAX 33700 MIN 1190

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to 1975, 1977 to current year.
CHEMICAL DATA: 1969 (c), 1970-74 (d), 1975 (c), 1980 (b), 1981 (c), 1982 (e).
MINOR ELEMENTS DATA: 1972 (b), 1973-75 (a), 1977-79 (e), 1980 (c).
PESTICIDE DATA: 1977-79 (e), 1980 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
PCB--1977-82 (e).
PCN--1977-79 (e), 1980 (a).
NUTRIENT DATA: 1969 (c), 1970-74 (d), 1975 (c), 1977-78 (e).
SEDIMENT DATA: 1977 (d), 1978 (a), 1981-82 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: March 1977 to current year.

REMARKS.--No sediment data Jan. 14 to Feb. 27 due to ice cover. Daily mean concentrations were not reported for periods when the sediment discharge was computed on the basis of sediment transport regression computations. This data is considered poor. Sampled periods are considered good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 189 mg/L Jan. 4, 1979; minimum daily mean, 1 mg/L on many days each year.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 10,600 tons (9,620 Mg) Apr. 29, 1979; minimum daily 4.0 (3.6 Mg) Sept. 7, 1980.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean 116 mg/L Oct. 27; minimum daily mean, 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 8,190 tons (7,430 Mg) Apr. 19; minimum daily, 5.6 tons (5.1 Mg) Aug. 8, 16, 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							
29...	1200	25700	--	--	.20	59	4090
30...	1100	23000	--	--	.40	20	1240
DEC							
01...	1130	5800	--	--	<.10	2	31
18...	1015	5210	--	--	<.10	1	14
JAN							
05...	1130	10300	--	--	<.10	38	1060
MAR							
12...	1200	6480	--	--	<.10	11	192
15...	1330	8400	138	--	<.10	12	272
26...	1000	16000	--	--	<.10	56	2420
26...	1415	16600	--	--	.10	73	3270
26...	2000	17700	141	--	<.10	82	3920
27...	0945	17000	--	--	<.10	76	3490
APR							
02...	1245	18300	116	--	.10	58	2870
04...	1115	21200	119	--	.10	55	3150
18...	0915	19000	107	--	<.10	34	1740
18...	1345	24000	96	--	.10	46	2980
18...	1700	28000	89	--	.20	81	6120
18...	1830	29300	85	--	.50	118	9330
18...	2130	31400	77	--	.70	164	13900
19...	0200	33600	70	--	.40	143	13000
19...	0515	34400	68	--	.90	130	12100
19...	0645	34700	76	--	.40	148	13900
19...	0830	34800	65	--	.30	121	11400
19...	1015	35100	64	--	.40	103	9760
19...	1500	34300	63	--	.30	73	6760
19...	1845	32800	63	--	.30	69	6110
19...	2045	31900	63	--	.60	61	5250
20...	0900	28000	62	--	1.5	30	2270
20...	1230	27200	61	--	.20	29	2130
22...	1100	26700	--	--	.40	19	1370
28...	1215	23300	66	--	.30	14	881
MAY							
17...	1015	4740	--	--	.10	2	26
JUN							
02...	1400	3800	135	7.5	.20	5	51
14...	1215	7170	108	7.3	<.10	3	58
22...	1545	5210	113	7.6	.10	4	56
JUL							
06...	1204	2840	--	--	.20	3	23
06...	1300	2790	--	--	.20	--	--
13...	1310	3520	120	7.6	.10	3	29
22...	1400	3060	115	7.5	.10	3	25
AUG							
02...	1500	2240	115	7.7	<.10	2	12
09...	1105	2120	109	7.6	.10	2	11
15...	1630	2160	130	7.7	.10	3	17
23...	1700	2280	120	7.6	.10	2	12
SEP							
01...	1300	2580	118	7.4	.10	2	14
06...	1630	1020	121	7.6	.10	3	8.3
15...	1430	2880	124	7.6	.10	3	23
30...	1200	3560	109	7.2	.10	2	19

01331095 HUDSON RIVER AT STILLWATER, NY--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3	52	6	167	1	16	17	229	---	---	---	47
2	3	50	7	175	1	18	19	267	---	---	2	30
3	5	88	8	207	1	19	18	208	---	---	---	56
4	5	76	4	104	1	19	16	248	---	---	---	56
5	4	55	4	100	1	17	34	901	---	---	---	56
6	3	43	5	121	6	98	2	48	---	---	---	57
7	4	62	4	107	1	15	3	65	---	---	---	51
8	3	50	5	127	3	50	2	39	---	---	---	50
9	16	287	2	49	3	48	1	18	---	---	---	57
10	3	52	2	49	2	31	1	19	---	---	---	57
11	13	211	2	44	2	30	1	16	---	---	6	97
12	13	171	4	86	2	28	2	32	---	---	8	138
13	3	45	2	44	3	39	2	32	---	---	6	123
14	2	30	3	65	1	13	---	---	---	---	13	312
15	3	44	4	65	2	27	---	---	---	---	12	290
16	3	42	2	31	1	15	---	---	---	---	5	125
17	4	52	3	49	2	30	---	---	---	---	5	125
18	3	34	3	50	2	29	---	---	---	---	5	119
19	2	24	3	51	2	29	---	---	---	---	8	191
20	3	44	2	35	3	36	---	---	---	---	15	396
21	8	118	10	204	2	23	---	---	---	---	23	609
22	8	108	5	84	3	38	---	---	---	---	15	401
23	14	214	2	35	4	61	---	---	---	---	16	475
24	13	265	3	59	3	57	---	---	---	---	21	675
25	7	128	3	57	3	46	---	---	---	---	31	1060
26	66	1120	2	34	3	40	---	---	---	---	75	3260
27	116	3130	2	33	3	37	---	---	---	---	77	3510
28	104	5080	1	17	15	204	---	---	1	11	24	881
29	63	4350	2	31	19	290	---	---	---	---	11	347
30	26	1540	2	29	18	283	---	---	---	---	10	329
31	7	295	---	---	19	304	---	---	---	---	23	789
TOTAL	---	17860	---	2309	---	1990	---	2122	---	11	---	14769

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	55	2630	---	352	---	43	---	76	2	12	3	23
2	58	2900	---	328	5	66	---	71	2	10	3	24
3	50	2470	---	272	---	142	---	70	2	16	2	16
4	55	3000	---	201	---	232	---	50	3	26	3	24
5	---	1120	---	180	---	319	---	25	2	18	4	22
6	---	788	---	129	---	661	3	27	4	32	2	6.4
7	---	478	---	117	---	765	---	43	2	15	4	26
8	---	362	---	115	---	1110	---	48	1	5.6	3	24
9	---	365	---	104	---	776	---	42	5	30	3	26
10	---	317	---	72	---	428	---	40	18	243	1	7.8
11	---	298	---	131	---	247	---	24	11	139	2	15
12	---	250	---	129	---	159	---	21	4	44	2	11
13	---	221	---	77	---	89	2	22	2	19	2	8.9
14	---	229	---	75	3	56	---	32	3	27	2	15
15	---	228	---	71	---	62	---	30	2	15	2	16
16	20	485	---	43	---	52	---	30	1	5.6	2	17
17	30	940	2	25	---	61	---	29	2	17	8	67
18	70	4230	---	50	---	64	---	19	4	33	6	52
19	90	8190	---	47	---	54	---	19	2	17	4	24
20	31	2340	---	48	---	41	---	27	1	8.1	3	18
21	24	1650	---	51	---	40	---	28	1	7.9	2	16
22	18	1270	---	52	4	59	3	26	1	5.6	4	36
23	18	1050	---	51	---	53	---	26	2	9.6	2	17
24	16	765	---	46	---	59	---	25	2	16	4	34
25	16	734	---	51	---	54	---	19	3	23	4	37
26	18	899	---	51	---	57	---	15	1	8.1	3	19
27	20	1260	---	51	---	43	---	23	1	8.0	5	30
28	14	881	---	47	---	38	---	25	1	8.3	3	28
29	---	627	---	41	---	51	---	27	3	17	4	37
30	---	447	---	34	---	73	---	26	1	5.7	3	27
31	---	---	---	38	---	---	---	28	2	16	---	---
TOTAL	---	41424	---	3079	---	5954	---	1013	---	857.5	---	724.1

01332500 HOOSIC RIVER NEAR WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'01", long 73°09'34", Berkshire County, Hydrologic Unit 02020003, on left bank 0.3 mi (0.5 km) downstream from Sherman Brook and 2.7 mi (4.3 km) east of junction of U.S. Highway 7 and State Highway 2 in Williamstown.

DRAINAGE AREA.--126 mi² (326 km²).

PERIOD OF RECORD.--Discharge: July 1940 to current year.
Water-quality records: Water years 1953-54, 1957-58, 1967-69.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 616.11 ft (187.790 m), Corps of Engineers datum. Prior to June 6, 1979, at site 1.2 mi (1.9 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Prior to 1966, slight diurnal fluctuation at low flow caused by mills upstream. Some regulation by Cheshire Reservoir 16 mi (26 km) upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--42 years, 273 ft³/s (7.731 m³/s), 29.42 in/yr (747 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Dec. 31, 1948, gage height, 14.85 ft (4.526 m) former site and datum, from rating curve extended above 4,300 ft³/s (120 m³/s) on basis of contracted-opening measurement of peak flow; minimum, 5.8 ft³/s (0.16 m³/s) Aug. 30, 31, Oct. 26, 1940; minimum daily, 24 ft³/s (0.68 m³/s) Sept. 9, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,400 ft³/s (68 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 18	0515	*5920	168	10.59	3.228	June 29	1945	2880	81.6	8.56	2.609

Minimum discharge, 40 ft³/s (1.13 m³/s) Sept. 10, 11, 20; minimum daily, 43 ft³/s (1.22 m³/s) Sept. 11, 15, 17, 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	195	131	147	130	127	1730	448	164	507	108	76
2	97	182	350	160	150	131	1070	391	320	339	97	93
3	123	168	311	135	350	123	1070	361	253	273	104	97
4	119	147	243	223	1400	119	1810	333	191	233	90	69
5	93	143	214	583	795	135	918	305	356	195	86	57
6	86	233	191	373	555	131	656	248	1240	173	76	51
7	156	263	191	300	373	135	562	233	724	151	69	51
8	268	204	177	238	339	160	562	209	435	143	63	48
9	164	173	168	209	300	139	494	195	322	123	76	45
10	135	164	156	168	278	143	454	191	248	115	79	45
11	108	160	147	160	219	156	474	177	219	100	69	43
12	90	151	143	155	233	305	494	164	191	131	63	45
13	97	139	131	150	258	379	480	160	177	135	60	45
14	108	135	127	155	258	429	591	143	300	104	57	45
15	100	139	127	160	233	356	649	139	223	100	57	43
16	86	131	140	160	209	322	811	135	186	97	57	45
17	83	127	150	140	204	327	1600	131	233	97	56	43
18	93	160	147	140	182	300	3530	119	219	127	57	45
19	238	191	127	135	173	339	1540	127	173	100	57	43
20	160	219	119	130	177	350	1540	160	204	108	60	43
21	127	294	135	130	177	373	1540	131	164	115	63	43
22	119	238	145	120	168	410	1000	115	151	90	60	48
23	139	195	175	120	160	422	763	151	248	79	60	66
24	356	173	240	125	156	474	885	373	214	73	60	73
25	223	156	200	120	135	664	935	278	173	69	66	57
26	289	147	164	120	127	1200	969	200	143	60	73	48
27	701	164	164	110	147	803	1500	160	131	60	57	48
28	528	186	160	110	139	548	893	139	209	367	45	54
29	350	160	147	110	---	480	649	228	1250	350	45	51
30	268	131	143	110	---	514	521	233	1310	156	45	45
31	223	---	127	110	---	885	---	173	---	115	48	---
TOTAL	5817	5268	5290	5306	8025	11379	30690	6550	10371	4885	2063	1605
MEAN	188	176	171	171	287	367	1023	211	346	158	66.5	53.5
MAX	701	294	350	583	1400	1200	3530	448	1310	507	108	97
MIN	83	127	119	110	127	119	454	115	131	60	45	43
CFSM	1.49	1.40	1.36	1.36	2.28	2.91	8.12	1.68	2.75	1.25	.53	.43
IN	1.72	1.56	1.56	1.57	2.37	3.36	9.06	1.93	3.06	1.44	.61	.47

CAL YR 1981 TOTAL 77006 MEAN 211 MAX 2680 MIN 44 CFSM 1.68 IN 22.73
WTR YR 1982 TOTAL 97249 MEAN 266 MAX 3530 MIN 43 CFSM 2.11 IN 28.71

01333000 GREEN RIVER AT WILLIAMSTOWN, MA

LOCATION.--Lat 42°42'32", long 73°11'50", Berkshire County, Hydrologic Unit 02020003, on left bank 0.1 mi (0.2 km) upstream from bridge on State Highway 2 at Williamstown and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--42.6 mi^2 (110.3 km^2).

PERIOD OF RECORD.--Discharge: September 1949 to current year.
Water-quality records: Water years 1967-69.

GAGE.--Water-stage recorder. Altitude of gage is 615 ft (187 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Slight diurnal fluctuation at times caused by mill upstream. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--33 years, 83.2 ft^3/s (2.356 m^3/s), 26.52 in/yr (674 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,060 ft^3/s (115 m^3/s) Dec. 21, 1973, gage height, 5.68 ft (1.731 m) in gage well, from rating curve extended above 750 ft^3/s (21 m^3/s) on basis of slope-area measurement at gage height 4.94 ft (1.506 m); maximum gage height, 6.35 ft (1.935 m) Mar. 13, 1977, from floodmarks, gage height in well unknown; minimum discharge, 3.1 ft^3/s (0.088 m^3/s) Sept. 20, 22, 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of about 7.5 ft (2.3 m), from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 850 ft^3/s (24 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 4	0200	1090	30.9	3.77	1.149	Apr. 18	0345	a*2060	58.3	4.53	1.381
Apr. 4	2130	1120	31.7	3.80	1.158	June 29	1715	1230	34.8	3.90	1.189

a From rating curve extended as explained above.

Minimum discharge, 8.7 ft^3/s (0.25 m^3/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	84	62	70	48	47	574	128	37	180	29	21
2	34	77	115	67	48	43	366	119	61	131	23	19
3	35	70	97	60	190	41	442	108	52	108	25	22
4	31	64	88	124	666	40	553	95	45	89	23	14
5	29	60	82	228	286	39	333	87	84	75	21	12
6	29	105	82	138	183	40	236	80	154	67	19	11
7	42	103	77	124	141	44	205	75	119	59	17	11
8	61	86	77	100	129	43	189	69	93	54	17	10
9	44	79	74	88	117	37	166	65	77	50	18	10
10	38	74	68	68	101	41	158	61	67	45	17	9.9
11	35	70	64	64	84	58	166	58	59	41	15	9.6
12	33	65	62	60	86	131	164	54	54	50	14	9.4
13	31	61	58	58	82	168	186	51	54	43	14	9.4
14	30	58	57	60	76	177	205	48	65	36	14	9.2
15	28	58	58	62	76	149	186	46	54	36	15	9.2
16	27	57	54	58	76	143	211	43	51	33	13	9.3
17	25	57	57	52	73	136	436	41	59	36	12	9.2
18	26	74	57	46	68	135	1060	37	52	33	12	9.0
19	44	67	54	42	65	139	471	37	46	31	11	8.9
20	33	88	50	39	63	155	376	41	51	34	12	8.8
21	30	101	61	36	59	149	346	37	44	31	14	9.4
22	28	91	61	34	55	174	258	33	41	25	11	9.7
23	46	82	103	32	50	166	198	43	60	23	11	13
24	92	79	103	30	47	186	180	63	47	21	11	12
25	63	73	82	29	40	254	171	52	41	20	15	9.9
26	90	68	74	27	40	489	218	45	38	18	14	9.4
27	210	76	73	26	48	311	311	39	36	17	11	10
28	182	73	70	26	47	215	208	36	71	75	11	11
29	134	67	68	27	---	183	165	47	408	47	10	9.7
30	114	61	64	29	---	180	143	44	361	30	9.9	9.6
31	95	---	60	32	---	319	---	39	---	26	9.8	---
TOTAL	1767	2228	2212	1936	3044	4432	8881	1821	2481	1564	468.7	335.6
MEAN	57.0	74.3	71.4	62.5	109	143	296	58.7	82.7	50.5	15.1	11.2
MAX	210	105	115	228	666	489	1060	128	408	180	29	22
MIN	25	57	50	26	40	37	143	33	36	17	9.8	8.8
CFSM	1.34	1.74	1.68	1.47	2.56	3.36	6.95	1.38	1.94	1.19	.35	.26
IN	1.54	1.95	1.93	1.69	2.66	3.87	7.76	1.59	2.17	1.37	.41	.29

CAL YR 1981 TOTAL 25370.9 MEAN 69.5 MAX 791 MIN 7.3 CFSM 1.63 IN 22.15
WTR YR 1982 TOTAL 31170.3 MEAN 85.4 MAX 1060 MIN 8.8 CFSM 2.01 IN 27.22

01333500 LITTLE HOOSIC RIVER AT PETERSBURG, NY

LOCATION.--Lat 42°45'50", long 73°20'16", Rensselaer County, Hydrologic Unit 02020003, on left bank 100 ft (30 m) downstream from highway bridge on dirt road, 1.0 mi (1.6 km) downstream from Petersburg, and 4.9 mi (7.9 km) upstream from mouth.

DRAINAGE AREA.--56.1 mi^2 (145 km^2).

PERIOD OF RECORD.--July 1951 to current year.

REVISED RECORDS.--WSP 1702: 1959.

GAGE.--Water-stage recorder. Datum of gage is 587.40 ft (179.039 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--31 years, 94.0 ft^3/s (2.662 m^3/s), 22.76 in/yr (578 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft^3/s (142 m^3/s) June 30, 1973, gage height, 9.20 ft (2.804 m); minimum, 1.9 ft^3/s (0.054 m^3/s) Sept. 11, 12, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 31, 1948, reached a stage of 9.4 ft (2.87 m), from floodmarks, discharge, 7,470 ft^3/s (212 m^3/s), on basis of contracted-opening measurements of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,250 ft^3/s (35.4 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 3	1945	ice jam		*5.62	1.713
Feb. 4	0145	1,290	36.5	5.08	1.548
Apr. 18	0345	*1,500	42.5	5.40	1.646

Minimum discharge, 5.9 ft^3/s (0.17 m^3/s) Sept. 20, gage height 1.20 ft (0.366 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	128	72	64	52	47	661	150	25	450	27	8.0
2	48	108	78	62	80	39	443	120	41	220	25	8.9
3	64	91	94	62	300	40	478	110	32	110	26	9.6
4	52	81	120	80	905	51	600	96	28	80	22	8.3
5	46	73	110	376	447	47	385	84	56	66	20	7.7
6	46	154	100	236	289	40	284	74	104	60	19	7.3
7	63	135	98	160	217	42	257	69	81	54	17	7.3
8	73	108	92	130	186	42	230	61	68	46	17	7.0
9	61	97	86	100	150	39	190	59	56	40	16	7.0
10	54	88	77	90	126	39	174	53	45	37	15	6.7
11	50	84	73	86	108	78	192	50	40	33	14	6.7
12	48	77	69	78	108	198	198	45	36	30	14	6.4
13	44	70	66	74	103	264	230	42	35	29	12	6.4
14	41	67	62	72	86	289	274	39	43	34	12	6.1
15	39	67	60	68	84	245	248	36	34	30	13	6.1
16	37	64	54	66	84	227	255	34	33	24	11	6.4
17	34	66	50	64	74	210	385	32	34	50	11	6.1
18	33	81	47	60	69	214	941	30	36	78	11	6.1
19	41	73	46	60	64	200	510	30	34	74	10	6.1
20	35	103	46	60	63	200	380	33	32	52	11	6.1
21	34	122	50	58	60	210	320	30	31	44	11	6.4
22	34	121	61	58	57	220	270	26	29	34	9.6	6.4
23	40	106	200	56	53	200	210	30	28	30	9.6	6.7
24	150	98	155	56	50	200	180	45	38	26	8.9	7.3
25	100	89	122	56	44	308	160	37	36	24	11	6.7
26	82	84	100	54	49	533	180	31	31	22	11	6.4
27	640	84	92	54	53	379	340	28	27	20	8.9	7.0
28	305	80	82	54	50	284	250	26	65	102	8.9	7.3
29	223	74	80	54	---	241	190	32	200	66	8.0	6.7
30	182	70	72	52	---	223	170	29	640	40	8.0	6.7
31	148	---	68	52	---	398	---	27	---	33	7.7	---
TOTAL	2881	2743	2582	2652	4011	5747	9585	1588	2018	2038	425.6	207.9
MEAN	92.9	91.4	83.3	85.5	143	185	320	51.2	67.3	65.7	13.7	6.93
MAX	640	154	200	376	905	533	941	150	640	450	27	9.6
MIN	33	64	46	52	44	39	160	26	25	20	7.7	6.1
CFSM	1.66	1.63	1.49	1.52	2.55	3.30	5.70	.91	1.20	1.17	.24	.12
IN.	1.91	1.82	1.71	1.76	2.66	3.81	6.36	1.05	1.34	1.35	.28	.14

CAL YR 1981 TOTAL 27870.0 MEAN 76.4 MAX 640 MIN 10 CFSM 1.36 IN 18.48
WTR YR 1982 TOTAL 36478.5 MEAN 99.9 MAX 941 MIN 6.1 CFSM 1.78 IN 24.19

01334000 WALLOOMSAC RIVER NEAR NORTH BENNINGTON, VT

LOCATION.--Lat 42°54'47", long 73°15'25", Bennington County, Hydrologic Unit 02020003, on left bank 0.6 mi (1.0 km) downstream from Paran Creek and 1.4 mi (2.3 km) south of North Bennington.

DRAINAGE AREA.--111 mi^2 (287 km^2).

PERIOD OF RECORD.--Discharge: June 1931 to current year.
Water-quality records: Water years 1953-54.

REVISED RECORDS.--WSP 781: 1933(M).

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (160 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream; diurnal fluctuation greater prior to 1960. Diversion upstream for municipal supply of Bennington and North Bennington since 1961. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--51 years, 221 ft^3/s (6.259 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,450 ft^3/s (239 m^3/s) Sept. 21, 1938, gage height, 12.04 ft (3.670 m), from rating curve extended above 2,800 ft^3/s (79 m^3/s) on basis of contracted-opening measurements at gage heights 10.13 ft (3.088 m), 10.49 ft (3.197 m), 11.50 ft (3.505 m), and 12.04 ft (3.670 m) and slope-area measurement and computation of flow over dam at gage height 12.04 ft (3.670 m); minimum, 4 ft^3/s (0.1 m^3/s) Sept. 27, 1932; minimum daily, 21 ft^3/s (0.59 m^3/s) Sept. 22, 23, 1964, July 12, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 18	0545	*4480	127	8.53	2600	Jun. 29	2000	2950	83.5	6.83	2.082

Minimum discharge, 35 ft^3/s (0.99 m^3/s) Sept. 13-15, minimum daily, 37 ft^3/s (1.05 m^3/s) Sept. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	211	138	125	200	112	1070	447	143	483	105	48
2	141	192	278	120	508	110	680	396	295	333	87	53
3	329	174	247	120	729	118	639	355	223	274	79	59
4	252	160	199	180	985	113	1120	324	170	239	75	56
5	178	149	175	409	474	128	639	291	286	201	71	49
6	165	292	170	268	310	118	478	259	780	173	66	46
7	264	334	163	190	255	131	415	243	465	158	63	43
8	346	234	159	172	230	145	420	220	320	148	63	42
9	235	199	156	160	200	140	391	212	239	131	71	42
10	190	185	147	155	180	120	368	201	197	118	134	42
11	166	174	141	150	170	167	382	183	170	108	81	42
12	149	170	136	145	170	387	391	170	161	148	68	41
13	136	163	131	140	170	439	391	161	161	187	70	38
14	127	154	128	140	165	474	456	148	231	123	68	37
15	121	148	132	135	160	364	456	143	177	105	64	38
16	115	153	135	130	155	315	542	137	151	99	61	39
17	110	155	134	130	150	311	1080	128	220	94	59	41
18	111	188	133	125	150	299	2500	120	194	131	54	41
19	192	236	121	125	151	324	1020	170	148	131	51	41
20	146	238	115	120	146	286	1130	295	170	110	53	39
21	127	307	115	120	140	291	1260	177	151	115	68	41
22	116	261	110	120	137	341	811	134	151	92	58	43
23	130	213	226	120	134	320	624	158	368	87	53	53
24	351	185	264	120	128	320	780	469	430	77	54	59
25	212	161	198	120	125	430	913	346	235	71	61	51
26	241	154	166	115	125	727	962	235	194	70	73	46
27	726	178	158	115	120	542	1320	190	177	70	58	45
28	526	190	149	115	115	396	791	158	164	170	53	50
29	356	158	143	110	---	355	580	190	1100	255	49	48
30	276	142	133	110	---	355	496	190	1090	125	46	46
31	235	---	127	110	---	610	---	158	---	92	45	---
TOTAL	6875	5858	4927	4514	6682	9288	23105	7008	8961	4718	2061	1359
MEAN	222	195	159	146	239	300	770	226	299	152	66.5	45.3
MAX	726	334	278	409	985	727	2500	469	1100	483	134	59
MIN	106	142	110	110	115	110	368	120	143	70	45	37

CAL YR 1981 TOTAL 70845 MEAN 194 MAX 2220 MIN 51
WTR YR 1982 TOTAL 85356 MEAN 234 MAX 2500 MIN 37

01334500 HOOSIC RIVER NEAR EAGLE BRIDGE, NY

LOCATION.--Lat 42°56'19", long 73°22'39", Rensselaer County, Hydrologic Unit 02020003, on right bank 0.5 mi (0.8 km) upstream from Case Brook, 1.2 mi (1.9 km) downstream from Walloomsac River, and 1.2 mi (1.9 km) southeast of Eagle Bridge.

DRAINAGE AREA.--510 mi² (1,321 km²).

PERIOD OF RECORD.--August 1910 to March 1922, July 1923 to current year.

REVISED RECORDS.--WSP 741: Drainage area. WSP 756: 1913(m). WSP 1302: 1922(M). WSP 1432: 1913 (minimum gage height). WSP 1502: 1911-12, 1914, 1920-21, 1928(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 355.41 ft (108.329 m) National Geodetic Vertical Datum of 1929. Prior to March 1922, nonrecording gage and July 24, 1923 to July 18, 1936, water-stage recorder, at site 0.2 mi (0.3 km) upstream at different datums.

REMARKS.--Records fair except those for winter periods, which are poor. Diurnal fluctuation at medium and low flow caused by powerplants above station.

AVERAGE DISCHARGE.--70 years (1911-21, 1924-82), 942 ft³/s (26.68 m³/s), 25.08 in/yr (637 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,400 ft³/s (1,570 m³/s) Dec. 31, 1948, gage height, 21.15 ft (6.447 m), from highwater mark in gage house, from rating curve extended above 13,000 ft³/s (368 m³/s) on basis of peak flow over downstream dams and contracted-opening measurements at gage heights 17.8 ft (5.42 m) and 21.15 ft (6.447 m), minimum, 24 ft³/s (0.68 m³/s) Sept. 14, 1913, minimum daily, 30 ft³/s (0.85 m³/s) Sept. 14, 1913.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,400 ft³/s (210 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 4	0915	Ice jam		*13.81	4.209
Apr. 18	1345	*15,200	430	11.68	3.560
June 30	0030	9,990	283	9.77	2.978

Minimum discharge, 118 ft³/s (3.34 m³/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	373	986	632	580	400	300	5850	1610	545	2210	394	158
2	431	893	1180	580	1000	290	3970	1430	797	1530	353	203
3	712	811	1210	520	2500	280	3120	1300	878	1210	339	231
4	740	740	1010	1190	4500	270	6390	1200	645	1030	310	223
5	563	685	908	2780	3000	270	3480	1080	678	878	287	187
6	504	970	885	1760	1800	260	2580	970	2710	754	273	162
7	678	1340	826	1480	1500	260	2010	900	2010	665	252	145
8	954	1010	811	800	1200	250	2120	826	1350	606	239	141
9	768	870	797	700	1000	250	1950	782	1010	545	252	138
10	626	811	747	620	880	300	1780	754	840	487	348	138
11	557	768	705	580	770	639	1850	692	705	442	273	135
12	504	733	678	540	670	1720	1970	645	645	475	239	135
13	470	685	652	520	600	2070	1970	613	594	626	231	131
14	458	652	626	490	540	2410	2300	569	811	458	223	128
15	436	652	580	470	490	1950	2250	539	719	404	218	125
16	415	639	540	450	500	1750	2310	510	600	394	207	128
17	384	639	500	430	460	1730	3800	492	712	363	203	135
18	373	712	480	410	420	1650	11300	464	733	692	195	128
19	600	848	460	400	400	1820	5440	475	575	600	191	121
20	569	855	440	400	380	1780	4380	754	613	470	184	121
21	470	1220	450	390	390	1900	4770	588	551	498	210	121
22	436	1140	626	370	380	2080	3400	475	527	399	195	128
23	426	946	978	370	360	2080	2510	475	923	353	180	145
24	1190	855	1430	360	340	2060	2520	1060	1100	319	180	191
25	893	775	1070	350	320	2510	2740	1090	712	291	191	173
26	878	733	840	350	300	4530	2710	761	606	273	231	141
27	2550	789	800	340	330	3500	4230	632	563	265	199	135
28	2390	840	740	340	310	2300	2860	551	613	551	173	138
29	1710	761	700	340	---	2010	2150	594	2980	1190	162	148
30	1330	685	660	340	---	1910	1820	747	5570	569	155	135
31	1120	---	600	340	---	2730	---	600	---	415	155	---
TOTAL	24508	25043	23561	19590	25740	47859	100530	24178	32315	19962	7242	4468
MEAN	791	835	760	632	919	1544	3351	780	1077	644	234	149
MAX	2550	1340	1430	2780	4500	4530	11300	1610	5570	2210	394	231
MIN	373	639	440	340	300	250	1780	464	527	265	155	121
CFSM	1.55	1.64	1.49	1.24	1.80	3.03	6.57	1.53	2.11	1.26	.46	.29
IN.	1.79	1.83	1.72	1.43	1.88	3.49	7.33	1.76	2.36	1.46	.53	.33

CAL YR 1981 TOTAL 296159 MEAN 811 MAX 11000 MIN 145 CFSM 1.59 IN 21.60
WTR YR 1982 TOTAL 354996 MEAN 973 MAX 11300 MIN 121 CFSM 1.91 IN 25.89

01335754 HUDSON RIVER ABOVE LOCK 1 NEAR WATERFORD, NY

LOCATION.--Lat 42°49'45", long 73°40'00", Saratoga County, Hydrologic Unit 02020003, 0.4 mi (0.6 km) upstream from dam at Lock 1C and 3.4 mi (5.5 km) downstream from dam at Lock 2C Champlain (Barge) Canal.

DRAINAGE AREA.--4,611 mi^2 (11,942 km^2).

PERIOD OF RECORD.--October 1976 to current year. Prior to October 1981 published as 01335770 Hudson River at Waterford, NY.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to February 1978, nonrecording gage 200 ft (61.0 m) downstream of this site.

REMARKS.--Records fair except those below 5,000 ft^3/s (141.6 m^3/s), those during winter periods, and those during period of questionable gage height record Aug. 12 to Sept. 20, which are poor. Streamflow affected by regulation for power generation and diversion for canal operations.

AVERAGE DISCHARGE.--6 years, 8,150 ft^3/s (231.0 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 71,800 ft^3/s (2,033 m^3/s) Mar. 15, 1977; minimum daily, 1,180 ft^3/s (33.42 m^3/s) Aug. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44,000 ft^3/s (1,246 m^3/s) Apr. 19, elevation 34.93 ft (10.647 m), minimum daily, 1,400 ft^3/s (39.65 m^3/s) Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6770	12300	6690	5930	5200	5500	27600	18800	5430	11100	3130	3100
2	6810	10800	8000	6000	6700	6100	27100	17300	5360	9630	2440	3300
3	7050	10200	8280	5640	9700	6200	24600	16300	6770	8980	3670	3400
4	6210	11100	8570	6540	14600	6200	29200	14000	7960	7010	3850	3400
5	5740	10900	7710	13500	13600	6300	24300	12500	9030	4310	3990	2300
6	6130	10100	7210	12700	11700	6300	20400	11000	13000	4500	3400	1400
7	6370	11800	6690	11500	10300	5800	14800	10000	14000	5700	3300	2600
8	7010	10900	7300	8500	9000	5700	13600	9450	15100	6090	2930	3200
9	7460	10400	7130	7700	8900	6300	13500	8510	13600	5590	2290	3400
10	6970	10300	7000	7900	9100	6400	12600	7670	10500	5240	5200	3100
11	6730	9400	6360	6900	8200	7000	11900	9030	10200	4130	5280	3000
12	5590	9200	5960	6900	8000	8750	11600	8740	9450	2800	4400	2200
13	5900	9000	5610	6800	7800	10900	11300	7870	7710	4900	3900	1900
14	6010	7830	5190	6700	7100	14200	12200	7630	8170	4640	3600	3000
15	5900	7580	5580	6700	6800	13900	12100	7540	7670	4060	3100	3100
16	5740	5620	6360	6700	7200	13000	11900	6370	6250	4240	2400	3300
17	5240	6570	6230	6100	7400	12500	14900	5320	7090	4060	3400	3300
18	5200	7050	6260	5300	7400	11700	29900	5780	7870	3540	3400	3400
19	5050	7170	6230	6100	7200	11900	41200	5660	6810	2990	3400	2400
20	6130	7420	5490	6200	7200	13400	33200	5620	5970	3960	3300	2400
21	6090	8740	5130	6000	6800	12800	30700	6210	4900	3960	3300	3030
22	5660	8170	5250	5800	6400	13200	30800	6410	6490	3920	2400	3670
23	6250	7460	6360	5900	6600	14300	25400	5820	6690	3470	2100	3500
24	8000	8400	8670	5800	6500	17400	20800	5660	7670	3230	3200	3400
25	7750	8170	7900	4900	6600	18600	20100	7710	7210	2890	3100	3710
26	7500	7300	6470	5600	6700	24800	21400	7170	7010	2190	3400	2890
27	11500	7010	5490	5700	6100	25800	27400	6400	5900	3160	3300	2220
28	19900	7420	5930	5800	4700	19600	27500	6130	5130	3470	3300	3670
29	26200	7210	6960	5800	---	15700	24400	5860	6850	4130	2400	3710
30	23400	6010	6890	5600	---	15900	21200	5130	14600	4310	2400	3710
31	17500	---	7000	5200	---	16900	---	4870	---	4210	3200	---
TOTAL	263760	261530	205900	212410	223500	373050	647600	262460	250390	146410	102480	90710
MEAN	8508	8718	6642	6852	7982	12030	21590	8466	8346	4723	3306	3024
MAX	26200	12300	8670	13500	14600	25800	41200	18800	15100	11100	5280	3710
MIN	5050	5620	5130	4900	4700	5500	11300	4870	4900	2190	2100	1400

CAL YR 1981 TOTAL 2421950 MEAN 6635 MAX 39100 MIN 1360
WTR YR 1982 TOTAL 3040200 MEAN 8329 MAX 41200 MIN 1400

01335770 HUDSON RIVER AT WATERFORD, NY

LOCATION.--Lat 42°47'19", long 73°40'28", at Saratoga-Rensselaer County line, Hydrologic Unit 02020003, at bridge on U.S. Highway 4 in Waterford, 0.4 mi (0.6 km) upstream from first branch of Mohawk River, and 2.8 mi (4.5 km) downstream from dam at lock 1 of the Champlain (Barge) Canal.

DRAINAGE AREA.--4,620 mi^2 (11,966 km^2).

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL DATA: 1975-76 (b), 1977 (c), 1978-79 (d), 1980-82 (e).
MINOR ELEMENTS DATA: 1975-76 (c), 1977-79 (e), 1980-81 (d), 1982 (a).
PESTICIDE DATA: 1975 (b), 1976 (d), 1977-79 (e), 1980, 1982 (a).
ORGANIC DATA: OC--1975-77 (c), 1978 (d), 1979 (c).
PCB--1975 (b), 1976 (d), 1977-82 (e).
PCN--1977-79 (e), 1980, 1982 (a).
NUTRIENT DATA: 1975-76 (c), 1977-78 (e), 1979-81 (d).
BIOLOGICAL DATA:
Bacteria--1977 (c), 1978 (d), 1979 (e), 1980-81 (d).
SEDIMENT DATA: 1975 (b), 1976-77 (e), 1978 (a), 1979 (b), 1980 (c), 1981-82 (e).

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

REMARKS.--Water discharge data based on records obtained above Lock 1 near Waterford (station 01335754) 3.2 mi (5.1 km) upstream. No sediment data Jan. 14 to Mar. 11 due to ice cover.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 810 mg/L March 14, 1977, minimum daily mean, 1 mg/L on many days.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 119,000 tons (108,000 Mg) March 14, 1977, minimum daily, 3.9 tons (3.5 Mg) Sept. 7, 1981.

EXTREMES FOR CURRENT YEAR.--
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 179 mg/L Apr. 19; minimum daily mean, 1 mg/L on many days in Oct., Dec., July, Aug., and Sept.
SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 19,900 tons (18,000 Mg) Apr. 19, minimum daily, 6.5 tons (5.9 Mg) Aug. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	PCB, TOTAL (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT							
29...	0900	26600	--	--	.50	99	7110
30...	1300	23800	--	--	.20	17	1090
DEC							
18...	1130	6540	--	--	<.10	5	88
JAN							
05...	1245	14600	--	--	<.10	71	2800
MAR							
12...	1300	8920	--	--	<.10	15	361
15...	1430	13000	160	--	<.10	32	1120
26...	0900	23500	175	--	.20	--	--
26...	1530	26000	173	--	.10	267	18700
26...	2115	28200	155	--	<.10	123	9370
27...	0830	26600	--	--	.10	104	7470
APR							
02...	1415	26600	123	--	<.10	67	4810
18...	1145	28900	118	--	.10	72	5620
18...	1930	40000	101	--	.30	282	30500
19...	0300	43800	85	--	.70	314	37100
19...	0930	42300	79	--	.70	178	20300
19...	1600	40600	74	--	.10	94	10300
19...	1945	38600	73	--	.20	90	9380
20...	1345	32700	78	--	<.10	39	3440
22...	1215	31000	--	--	.20	23	1930
28...	1345	27200	73	--	.20	17	1250
MAY							
17...	0900	4940	--	--	.20	6	80
JUN							
02...	1530	4060	--	--	.20	3	33
14...	1430	8510	125	7.5	.30	5	115
22...	1645	5550	139	7.7	.40	4	60
JUL							
13...	1725	4390	130	7.6	<.10	4	47
22...	1530	3880	142	7.9	<.10	4	42
AUG							
02...	1630	2570	139	7.8	.20	2	14
09...	0920	E1200	140	7.6	.10	4	E13
15...	1745	3100	160	7.7	.10	4	33
23...	1800	2100	162	7.8	<.10	3	17
SEP							
01...	1530	2900	144	7.6	<.10	3	23
06...	1730	E1400	161	7.7	.10	3	E11
15...	1615	3200	141	7.7	<.10	1	8.6
30...	1300	3330	128	7.7	<.10	4	36

E Estimated.

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)
OCT											
30...	1300	1	<1	1	6	840	3	70	4	<1	40

DATE	TIME	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ACENAPHTHYLENE TOTAL (UG/L)	ACENAPHTHENE TOTAL (UG/L)	ANTHRACENE TOTAL (UG/L)	BENZO B FLUORANTHENE TOTAL (UG/L)	BENZO K FLUORANTHENE TOTAL (UG/L)	BNZO-A-PYRENE TOTAL (UG/L)	44BENZO-A-PYRENE BOT.MAT (UG/KG)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L)
DEC												
01...	1300	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITRO-SODIPHENYLAMINE TOTAL (UG/L)
DEC												
01...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	N-NITRO-SODIMETHYLAMINE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L)	1,3-DICHLOROBENZENE TOTAL (UG/L)	1,4-DICHLOROBENZENE TOTAL (UG/L)	2-CHLORONAPHTHALENE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)
DEC												
01...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	2,4-DINITROTOLUENE TOTAL (UG/L)	2,6-DINITROTOLUENE TOTAL (UG/L)	3,3'-DICHLOROBENZIDINE TOTAL (UG/L)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L)	2,3,7,8 TETRACHLORODIBENZO-P-DIOXIN TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	BENZIDINE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)
DEC											
01...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

HUDSON RIVER BASIN

01335770 HUDSON RIVER AT WATERFORD, NY--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5	91	7	232	3	54	11	176			---	---
2	4	74	6	175	4	86	15	243			---	---
3	4	76	6	165	5	112	16	244			---	---
4	2	34	5	150	4	93	17	300			---	---
5	1	15	5	147	4	83	59	2150			---	---
6	3	50	5	136	2	39	20	686			---	---
7	7	120	4	127	2	36	7	217			---	---
7	7	120	4	127	2	36	7	217			---	---
8	4	76	3	88	4	79	7	161			---	---
9	4	81	4	112	2	39	7	146			---	---
10	5	94	3	83	3	57	6	128			---	---
11	2	36	3	76	6	103	4	75			---	---
12	2	30	4	99	3	48	2	37			15	354
13	1	16	2	49	2	30	2	37			16	471
14	2	32	2	42	2	28	---	---			17	652
15	1	16	2	41	1	15	---	---			24	901
16	3	46	8	121	2	34	---	---			19	667
17	7	99	3	53	2	34	---	---			9	304
18	10	140	2	38	3	51	---	---			8	253
19	11	150	3	58	2	34	---	---			8	257
20	12	199	4	80	1	15	---	---			18	651
21	21	345	4	94	1	14	---	---			20	691
22	8	122	4	88	1	14	---	---			19	677
23	11	186	3	60	1	17	---	---			20	772
24	10	216	3	68	2	47	---	---			22	1030
25	22	460	3	66	1	21	---	---			25	1260
26	22	445	4	79	1	17	---	---			148	9910
27	30	931	3	57	2	30	---	---			84	5850
28	72	3870	5	100	2	32	---	---			10	529
29	75	5310	3	58	12	226	---	---			10	424
30	19	1200	3	49	11	205	---	---			9	386
31	13	614	---	---	12	227	---	---			12	548
TOTAL	---	15174	---	2791	---	1920	---	4600			---	26587

DAY	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	32	2380	3	152	6	88	6	180	3	25	3	25
2	64	4680	9	420	4	58	2	52	2	13	1	8.9
3	60	3990	4	176	6	110	3	73	3	30	3	28
4	64	5050	5	189	4	86	4	76	2	21	4	37
5	18	1180	4	135	35	853	1	12	5	54	7	43
6	7	386	5	148	32	1120	1	12	1	9.2	4	15
7	11	440	6	162	14	529	1	15	5	45	4	28
8	4	147	8	204	10	408	1	16	1	7.9	5	43
9	4	146	6	138	6	220	2	30	4	25	4	37
10	12	408	8	166	5	142	3	42	4	56	2	17
11	11	353	5	122	6	165	2	22	2	29	3	24
12	6	188	6	142	4	102	1	7.6	6	71	3	18
13	6	183	4	85	5	104	2	26	5	53	3	15
14	5	165	6	124	5	110	2	25	2	19	2	16
15	30	980	6	122	5	104	1	11	4	33	2	17
16	52	1670	5	86	4	67	3	34	2	13	2	18
17	57	2290	6	86	4	77	3	33	1	9.2	4	36
18	110	8880	6	94	3	64	3	29	2	18	3	28
19	179	19900	6	92	3	55	2	16	1	9.2	4	26
20	45	4030	3	46	4	64	1	11	2	18	4	26
21	20	1660	7	117	3	40	2	21	1	8.9	3	25
22	18	1500	4	69	4	70	2	21	1	6.5	3	30
23	12	823	4	63	5	90	2	19	2	11	3	28
24	12	674	7	107	2	41	3	26	2	17	2	18
25	13	706	3	62	4	78	2	16	2	17	5	50
26	15	867	6	116	2	38	8	47	1	9.2	5	39
27	17	1260	5	86	2	32	3	26	2	18	3	18
28	15	1110	3	50	3	42	2	19	1	8.9	2	20
29	4	264	5	79	18	333	1	11	2	13	2	20
30	6	343	6	83	35	1380	2	23	6	39	4	40
31	---	---	5	66	---	---	5	57	3	26	---	---
TOTAL	---	66653	---	3787	---	6670	---	1008.6	---	733.0	---	793.9

01336000 MOHAWK RIVER BELOW DELTA DAM, NEAR ROME, NY

LOCATION.--Lat 43°15'52", long 75°26'12", Oneida County, Hydrologic Unit 02020004, on right bank at Rome Fish Hatchery, 1.0 mi (1.6 km) downstream from Delta Dam, and 4.0 mi (6.4 km) north of Rome.

DRAINAGE AREA.--150 mi^2 (389 km^2).

PERIOD OF RECORD.--July 1921 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 851: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 474.00 ft (144.475 m) Barge Canal datum. Prior to Jan. 24, 1937, nonrecording gage at site 200 ft (61 m) downstream at same datum.

REMARKS.--Records excellent except those for period of no gage-height record, Jan. 17 to Feb. 24, which are fair. During canal navigation season, water is diverted from Black River through Forestport feeder and Black River Canal (flowing south) into basin above Delta Reservoir. Flow regulated by Delta Reservoir (usable capacity, 2,800 mil ft^3 or 79.0 hm^3) except for Oct. 1 to Nov. 13, Nov. 17 to Dec. 7, April 19 to May 11, June 3-13, when reservoir spilled. Small quantity of water diverted from Delta Reservoir for fish hatchery use and later returned to river, part above and part below station.

AVERAGE DISCHARGE.--61 years, 378 ft^3/s (10.70 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,560 ft^3/s (242 m^3/s) Oct. 2, 1945, gage height, 11.18 ft (3.408 m); minimum, 24 ft^3/s (0.68 m^3/s) July 30, 1980, gage height, 0.67 ft (0.204 m); minimum daily, 45 ft^3/s (1.27 m^3/s) Jan. 17, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,490 ft^3/s (98.8 m^3/s) Oct. 28, gage height, 7.41 ft (2.259 m); minimum, 27 ft^3/s (0.76 m^3/s) Aug. 24, gage height, 0.75 ft (0.229 m); minimum daily, 181 ft^3/s (5.13 m^3/s) May 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	301	548	268	352	1000	219	752	320	191	242	301	316
2	310	460	265	352	1000	219	1160	283	295	240	301	316
3	316	385	277	352	1000	219	2260	256	368	237	301	316
4	295	332	277	389	1000	216	2300	336	313	237	301	310
5	274	301	271	375	590	216	2220	301	265	237	298	301
6	336	355	274	372	380	216	2320	256	600	237	298	301
7	609	460	248	365	380	216	2310	232	668	237	298	301
8	958	413	248	362	360	216	2280	214	478	237	298	298
9	716	365	248	449	325	216	1200	219	349	237	323	298
10	505	313	248	475	325	216	703	224	271	234	304	295
11	382	289	248	475	325	221	703	203	224	234	301	295
12	295	265	248	513	325	234	707	196	201	234	298	295
13	358	245	248	568	325	242	730	198	194	234	298	292
14	336	237	248	564	325	240	647	196	216	234	298	289
15	277	234	248	564	325	237	548	194	237	234	298	280
16	254	245	248	564	325	237	560	194	237	240	295	274
17	237	254	248	565	325	229	647	194	240	245	292	271
18	271	259	248	675	325	232	794	194	240	245	292	271
19	580	248	248	825	325	240	625	191	240	245	292	268
20	617	349	248	825	325	240	938	191	240	245	292	268
21	513	560	248	825	325	248	1420	191	242	245	292	268
22	413	556	248	825	325	254	1170	191	245	245	292	265
23	378	471	342	885	250	254	822	186	245	307	292	268
24	452	392	362	1000	220	256	707	186	242	349	280	268
25	417	339	355	1000	221	271	672	184	242	345	304	268
26	368	292	352	1000	221	283	638	184	240	320	304	265
27	2010	298	352	1000	219	262	681	181	240	301	304	268
28	3120	352	352	1000	219	251	596	181	237	304	307	268
29	1900	339	352	1000	---	254	467	189	292	304	320	268
30	1080	292	352	1000	---	262	382	186	254	301	320	265
31	725	---	352	1000	---	509	---	194	---	301	320	---
TOTAL	19603	10448	8771	20516	11610	7625	31959	6645	8546	8087	9314	8526
MEAN	632	348	283	662	415	246	1065	214	285	261	300	284
MAX	3120	560	362	1000	1000	509	2320	336	668	349	323	316
MIN	237	234	248	352	219	216	382	181	191	234	280	265

CAL YR 1981 TOTAL 108645 MEAN 298 MAX 3120 MIN 173
WTR YR 1982 TOTAL 151650 MEAN 415 MAX 3120 MIN 181

01346000 WEST CANADA CREEK AT KAST BRIDGE, NY

LOCATION.--Lat 43°04'08", long 74°59'26", Herkimer County, Hydrologic Unit 02020004, on left bank 600 ft (183 m) downstream from bridge on old State Highway 28 at Kast Bridge, 1.2 mi (1.9 km) downstream from North Creek, 2.2 mi (3.5 km) north of Herkimer, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--556 mi^2 (1,440 km^2).

PERIOD OF RECORD.--January 1907, April to December 1907, March 1908 to December 1909, April 1910 to December 1913, April to December 1914, April 1915 to January 1917, April to November 1917, April to June 1918, October 1920 to current year. Monthly discharge only for some periods, published in WSP 1302. Gage height and discharge measurements only, May 1905 to December 1906.

GAGE.--Water-stage recorder. Datum of gage is 438.99 ft (133.804 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1920, nonrecording gage at former highway bridge 500 ft (152 m) upstream at different datum.

REMARKS.--Records good, except for winter periods and periods of no gage height record (April 20 to May 19 and May 23 to July 1), which are poor. Since March 1914, flow regulated by Hinckley Reservoir, 31 mi (50 km) above station (usable capacity, 3,320 mil ft^3 or 94.0 hm^3). Diurnal fluctuation at low and medium flow caused by powerplants above station. Diversion at Trenton Falls, 26 mi (42 km) above station, by Ninemile feeder since 1915 during canal navigation season. Diversion from Hinckley Reservoir for Utica water supply returned to Mohawk River.

AVERAGE DISCHARGE.--62 years (1921-82), 1,318 ft^3/s (37.33 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,300 ft^3/s (660 m^3/s) Mar. 26, 1913, from reports of State Engineer and Surveyor; maximum gage height, 10.47 ft (3.191 m) probably Feb. 17, 1943, from floodmark in gage well (ice jam); minimum discharge, 20 ft^3/s (0.57 m^3/s) Sept. 3, 1929, gage height, 0.90 ft (0.274 m); minimum daily, 59 ft^3/s (1.67 m^3/s) Sept. 2, 1929.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,600 ft^3/s (357 m^3/s) Oct. 29, gage height, 6.62 ft (2.018 m), minimum discharge, 195 ft^3/s (5.52 m^3/s) Aug. 16, 23, Sept. 7, 13, 19, 20; gage height, 1.77 ft (0.539 m) Aug. 16, minimum daily, 245 ft^3/s (6.94 m^3/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1110	2870	1250	1020	1200	900	6710	3000	1300	2000	544	576
2	1140	2170	1370	979	1300	900	4480	2700	2200	1130	572	576
3	1150	1850	1450	1160	1400	940	4210	2500	2000	1140	586	603
4	996	1500	1370	1600	1500	780	5070	2300	1100	823	559	540
5	972	1280	1220	2310	1600	1100	3390	2200	1100	725	467	506
6	1520	1690	1180	1690	1500	880	3000	2200	1200	780	545	438
7	2200	1670	1020	1230	1300	740	2780	2100	1600	849	388	303
8	1910	1550	1270	1000	1400	880	2820	2000	1300	968	279	532
9	1430	1450	1250	1000	1400	1000	2770	1900	1200	933	701	576
10	1170	1280	1240	820	1400	900	2970	1700	1100	799	845	631
11	1040	1260	1240	760	1300	640	3000	1400	1000	651	640	540
12	1100	1270	1070	960	1200	940	2670	1300	960	669	515	324
13	1190	1250	1080	880	1200	1100	3100	1200	820	833	438	324
14	1160	1250	1090	940	1400	1300	3890	1200	740	777	498	532
15	1130	1230	1240	960	1500	1200	3720	1200	840	835	303	549
16	1130	1370	1240	880	1300	1100	4090	1200	780	748	310	567
17	1070	1360	1240	880	1300	960	5390	1200	840	702	473	558
18	1040	1310	1240	880	1200	1300	7080	1100	1200	618	481	532
19	1710	1290	816	1000	1200	1300	4060	1100	920	706	515	324
20	1230	1600	570	1100	1100	1400	3700	1230	740	787	473	303
21	1250	1960	522	1100	1100	1700	2900	1310	700	763	481	506
22	1190	1650	921	1100	1100	2100	3100	931	840	783	438	549
23	1400	1320	1510	960	1100	2420	3200	900	1000	783	413	640
24	1600	1380	1440	1000	1000	2850	3100	1500	900	664	523	739
25	1190	1300	1290	1000	1000	3160	3500	1400	820	562	549	523
26	1260	1290	1230	1100	980	3920	4000	1100	740	657	612	245
27	4830	1430	1110	1200	980	2540	4500	1000	680	716	603	421
28	9120	1490	1140	1300	940	1960	4800	1100	720	791	549	694
29	11400	1320	1140	1300	---	1770	4000	800	3000	808	370	631
30	7140	1200	1240	1200	---	2330	3500	900	3100	748	370	370
31	4100	---	1230	1200	---	6300	---	1000	---	655	549	---
TOTAL	69878	44840	36219	34509	34900	51310	115500	46671	35440	25403	15589	15152
MEAN	2254	1495	1168	1113	1246	1655	3850	1506	1181	819	503	505
MAX	11400	2870	1510	2310	1600	6300	7080	3000	3100	2000	845	739
MIN	972	1200	522	760	940	640	2670	800	680	562	279	245

CAL YR 1981 TOTAL 486140 MEAN 1332 MAX 11400 MIN 255
WTR YR 1982 TOTAL 525411 MEAN 1439 MAX 11400 MIN 245

01347000 MOHAWK RIVER NEAR LITTLE FALLS, NY

LOCATION.--Lat 43°00'52", long 74°46'48", Herkimer County, Hydrologic Unit 02020004, on left bank 1,800 ft (549 m) downstream from Rocky Rift Dam, 2.1 mi (3.4 km) upstream from East Canada Creek, and 4.5 mi (7.2 km) southeast of city of Little Falls.

DRAINAGE AREA.--1,348 mi^2 (3,491 km^2).

PERIOD OF RECORD.--October 1927 to current year.

REVISED RECORDS.--WSP 741: 1929(M), Drainage area. WSP 1302: 1901, 1932(M). WSP 1432: 1928-30.

GAGE.--Water-stage recorder. Datum of gage is 308.84 ft (94.134 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records good except those for January, which are poor. Records of daily discharge do not include diversion at Rocky Rift Dam into Erie (Barge) Canal for lockages at lock 16, near St. Johnsville. Monthly and annual figures of diversion at Rocky Rift Dam are published separately below. During canal navigation season, water is received from Black River basin through Black River Canal flowing south, and from Chenango River basin through Oriskany Creek feeder. Water is diverted into (or may occasionally be received from) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica. Diurnal fluctation caused by powerplants and locks and dams on Erie (Barge) Canal. Regulation by Delta and Hinckley Reservoirs (combined usable capacity, 6,120 mil ft^3 or 173 hm^3) (see Reservoirs in Hudson River Basin).

COOPERATION.--Figures of diversions at Rocky Rift Dam into Erie (Barge) Canal furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--55 years, 2,798 ft^3/s (79.24 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (river channel only), 33,100 ft^3/s (937 m^3/s) Mar. 14, 1977, gage height, 19.17 ft (5.843 m), from high-water mark in gage house; minimum (river channel only), 214 ft^3/s (6.06 m^3/s) Aug. 18, 1949, gage height, 3.75 ft (1.43 m), minimum daily (including canal), probably not less than 463 ft^3/s (13.1 m^3/s) Sept. 2, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 16,000 ft^3/s (450 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1245	20,400	578	15.10	4.602	April 4	0030	16,200	459	13.52	4.121
April 1	0115	*21,700	615	*15.55	4.740	June 29	1815	18,200	515	14.31	4.362

Minimum discharge recorded (river channel only), 544 ft^3/s (15.4 m^3/s) Sept. 7, gage height, 4.54 ft (1.384 m); minimum daily (river channel only), 625 ft^3/s (17.7 m^3/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	5550	2510	2020	2500	1590	18300	4970	2450	5300	1160	1060
2	2340	4140	2600	2120	2400	1570	14300	4760	5550	2750	1080	1080
3	2510	3490	3010	1980	2990	1600	12600	4300	4530	2360	1320	1160
4	2350	2920	3780	2500	4390	1560	13400	3900	2200	1840	1190	1070
5	2160	2550	2780	5030	4930	1510	10400	3740	2170	1580	1070	1010
6	2340	3070	2320	4430	3980	1630	9220	3730	3650	1520	1120	953
7	6480	3890	2470	3360	3100	1480	7990	3600	4150	1540	1010	656
8	6370	3480	3100	2830	2380	1450	7130	3000	2850	2190	854	913
9	5350	3180	2490	2370	2370	1560	6790	3200	2530	2130	1190	956
10	3830	2720	2150	2100	2260	1590	6520	3290	2000	1640	1890	1020
11	2850	2490	2090	1900	2090	1390	5980	2410	1990	1310	1610	1010
12	2450	2390	1870	1800	2050	1960	5260	2180	1760	1280	1190	821
13	2010	2220	1890	2300	1950	2810	5520	2080	1500	1350	1030	635
14	2240	2130	1880	2300	1880	4380	7600	2050	1460	1340	1080	902
15	2170	2120	2020	2400	1860	5180	7430	1980	1600	1320	903	1020
16	2090	2260	2060	2400	1960	4930	7360	1910	1530	1290	732	1040
17	1920	2530	2030	2300	2150	4400	9190	1900	2600	1230	978	999
18	1820	2410	2020	1900	2100	4910	13300	1860	2370	1130	957	955
19	2540	2340	1710	2100	2010	5520	8900	1900	1800	1520	1020	873
20	2620	2670	1620	2400	1950	5960	7660	1900	1500	1570	975	625
21	2560	5040	1690	2300	1920	6680	7470	1850	1430	1370	1070	893
22	2310	4740	1930	2400	1910	7750	7330	1520	1670	1260	982	926
23	2310	3840	2410	2400	1910	7890	6800	1660	1920	1270	834	1060
24	2990	3450	3640	2200	1830	8500	6300	2640	1740	1210	1040	1470
25	2620	2810	3510	2000	1930	9370	6800	2320	1590	1150	1010	1190
26	2430	2740	2940	2100	1900	11600	7710	1850	1440	1190	1120	781
27	9050	2700	2490	2400	1780	9620	8930	1670	1360	1240	1090	819
28	16600	3810	2380	2700	1670	7510	8970	1750	1400	1330	1090	1280
29	18800	3460	2320	2600	---	5580	7310	1470	7840	1550	945	1160
30	14700	2790	2320	2600	---	5600	5210	1820	8070	1410	745	1020
31	9970	---	2180	2600	---	12300	---	1920	---	1280	1030	---
TOTAL	143080	93930	74210	76840	66150	149380	257680	79130	78650	50450	33315	29357
MEAN	4615	3131	2394	2479	2363	4819	8589	2553	2622	1627	1075	979
MAX	18800	5550	3780	5030	4930	12300	18300	4970	8070	5300	1890	1470
MIN	1820	2120	1620	1800	1670	1390	5210	1470	1360	1130	732	625
‡	11.1	6.3	0.5	0	0	0	0.4	17.2	16.0	20.0	11.8	18.1

CAL YR 1981 TOTAL 957946 MEAN 2625 MAX 18800 MIN 724 ‡ 8.8
WTR YR 1982 TOTAL 1132172 MEAN 3102 MAX 18800 MIN 625 ‡ 8.5

‡ Diversion, equivalent in cubic feet per second, at Rocky Rift Dam into Erie (Barge) Canal for lockages at Lock 16.

01348000 EAST CANADA CREEK AT EAST CREEK, NY

LOCATION.--Lat 43°01'00", long 74°44'28", Herkimer County, Hydrologic Unit 0202004, on right bank at village of East Creek, 0.2 mi (0.3 km) downstream from Niagara Mohawk Power Corp. Beardslee powerplant, 1.2 mi (1.9 km) upstream from mouth, and 3.5 mi (5.6 km) northwest of St. Johnsville.

DRAINAGE AREA.--291 mi^2 (754 km^2).

PERIOD OF RECORD.--December 1945 to current year.

GAGE.--Water-stage recorder. Datum of gage is 335.70 ft (102.321 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Extensive diurnal fluctuation and slight regulation caused by powerplants above station. City of Little Falls diverts about 5 ft^3/s (0.14 m^3/s) for municipal supply.

AVERAGE DISCHARGE.--36 years (1947-82), 682 ft^3/s (19.31 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s (377 m^3/s) Mar. 14, 1977, gage height, 7.42 ft (2.262 m); minimum, 0.05 ft^3/s (0.001 m^3/s) July 9, 1978, gage height 0.47 ft (0.143 m); minimum gage height, 0.44 ft (0.134 m) July 29, 1977; minimum daily, 0.22 ft^3/s (0.006 m^3/s) July 9, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 2, 1945, reached a stage of 9.0 ft (2.74 m), from floodmarks (discharge, 24,000 ft^3/s or 680 m^3/s, from slope-area measurement of peak flow).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,400 ft^3/s (351 m^3/s) April 18, gage height, 7.24 ft (2.207 m); minimum, 7.0 ft^3/s (0.198 m^3/s) May 18, 19, 20, June 20; gage height, 0.87 ft (0.265 m); minimum daily, 12 ft^3/s (0.340 m^3/s) Feb. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	867	1300	427	291	275	229	4640	1890	480	1800	29	47
2	457	840	449	178	484	229	4130	1620	834	1030	73	54
3	390	859	518	293	372	213	3160	1310	1340	500	213	56
4	264	819	617	677	568	290	3920	895	911	401	61	54
5	622	834	393	787	804	367	2880	817	776	110	26	51
6	543	1060	433	815	955	303	2200	636	2080	326	85	57
7	1250	1330	427	1090	988	175	1650	696	2340	259	46	55
8	2050	906	351	868	851	131	1340	427	1680	542	52	55
9	1870	788	561	807	804	346	1090	435	993	119	85	121
10	1200	780	398	419	483	268	865	501	761	226	379	290
11	597	769	233	622	589	259	1010	716	516	34	181	127
12	781	608	260	300	481	489	924	563	353	221	213	55
13	692	761	164	263	502	394	887	141	431	133	237	400
14	662	624	287	287	303	633	1110	540	378	98	169	218
15	474	625	205	380	408	624	2050	228	365	35	152	176
16	269	463	256	238	399	748	2880	249	346	98	180	158
17	599	480	259	317	439	549	5060	241	493	44	61	220
18	181	568	295	278	568	543	10000	190	750	83	52	113
19	714	514	258	239	270	599	5110	264	728	70	22	15
20	764	533	199	220	368	493	4560	795	249	174	55	129
21	683	691	143	387	333	787	6370	770	520	141	58	81
22	488	770	267	331	366	714	4660	771	326	131	22	18
23	1020	899	757	252	401	797	2990	772	524	132	54	19
24	622	811	702	219	428	803	3050	431	648	41	55	20
25	681	789	548	236	338	787	3970	574	448	39	86	140
26	1230	779	400	258	235	1130	4210	784	18	39	82	50
27	4560	746	125	284	261	947	4450	786	368	44	100	286
28	8460	425	438	111	12	984	3640	563	335	134	56	112
29	5570	770	539	203	---	1150	2680	447	1120	41	53	180
30	2780	444	330	220	---	913	2150	564	2820	47	84	78
31	1820	---	315	357	---	1660	---	581	---	77	53	---
TOTAL	43160	22585	11554	12227	13285	18554	97636	20197	23931	7169	3074	3435
MEAN	1392	753	373	394	474	599	3255	652	798	231	99.2	115
MAX	8460	1330	757	1090	988	1660	10000	1890	2820	1800	379	400
MIN	181	425	125	111	12	131	865	141	18	34	22	15

CAL YR 1981 TOTAL 257537 MEAN 706 MAX 8740 MIN 14
WTR YR 1982 TOTAL 276807 MEAN 758 MAX 10000 MIN 12

01349000 OTSQUAGO CREEK AT FORT PLAIN, NY

LOCATION.--Lat 42°55'46", long 74°37'35", Montgomery County, Hydrologic Unit 02020004, on left bank 25 ft (8 m) downstream from bridge on State Highway 163 in Fort Plain, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--59.2 mi^2 (153 km^2).

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.16 ft (92.098 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except for those during winter months and periods of no gage height record (water below intake pipe), Aug. 18-20, Sept. 6-15, which are poor. Occasional diurnal fluctuation at low flow.

AVERAGE DISCHARGE.--33 years, 85.9 ft^3/s (2.433 m^3/s), 19.72 in.yr (501 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s (294 m^3/s) Oct. 28, 1981, gage height, 11.44 ft (3.487 m) in gage well, 12.0 ft (3.658 m) from floodmarks; from rating curve extended above 3,200 ft^3/s (90.6 m^3/s) on basis of contracted-opening measurement of peak flow at gage height 11.44 ft (3.487 m) in gage well, 12.0 ft (3.658 m) from floodmarks; minimum, 0.6 ft^3/s (0.017 m^3/s) Nov. 30, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s (57 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0730	*a10,400	294	*11.44 b12.0	3.487 3.66	Apr. 3	2030	3,030	85.8	7.53	2.295
Mar. 31	2245	3,890	110	8.16	2.487	June 17	0830	2,450	69.4	6.45	1.966

a From rating curve extended as explained above.
b From floodmarks near gage.

Minimum daily discharge, 2.0 ft^3/s (0.057 m^3/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	80	45	35	20	31	1720	33	86	57	6.4	5.2
2	67	70	80	35	40	33	564	31	133	38	12	4.0
3	78	58	116	40	100	28	951	29	52	31	11	4.0
4	54	51	81	233	400	27	759	29	38	27	7.8	3.1
5	40	47	64	495	350	32	216	27	46	23	6.9	2.8
6	112	133	40	186	270	29	151	28	534	20	6.4	2.4
7	213	113	35	114	200	29	110	27	162	18	5.2	2.3
8	156	85	32	70	150	29	100	26	71	40	5.2	2.3
9	78	81	29	50	120	26	100	29	42	26	6.4	2.2
10	54	58	28	45	100	29	213	43	31	16	11	2.2
11	44	54	27	40	80	32	211	27	33	14	7.8	2.1
12	38	48	27	35	66	86	193	24	30	13	6.4	2.1
13	33	41	26	40	56	894	238	24	30	12	5.2	2.0
14	30	40	26	45	50	1230	410	22	67	11	4.6	2.0
15	27	43	25	40	40	1090	308	21	33	9.9	4.0	7.8
16	26	60	24	30	42	851	356	20	26	9.6	4.0	7.5
17	24	48	23	22	50	538	606	19	654	8.9	3.7	4.6
18	23	43	22	18	42	353	601	18	111	8.9	3.1	3.7
19	29	42	22	16	37	578	193	19	64	15	2.8	3.1
20	27	86	22	15	34	913	143	26	46	13	3.7	3.1
21	22	149	23	13	32	596	141	26	39	12	5.2	3.7
22	19	90	25	12	30	822	90	19	36	8.9	3.1	3.7
23	26	75	96	12	29	748	72	25	44	8.0	3.1	5.9
24	58	71	230	13	28	560	62	122	31	7.5	3.1	8.6
25	33	60	125	14	28	748	54	58	25	7.2	4.6	6.4
26	40	50	60	13	36	907	53	34	24	6.9	5.2	4.6
27	800	100	54	12	37	341	73	26	24	6.7	3.1	8.0
28	2670	119	50	12	34	163	51	23	22	7.8	3.1	8.3
29	278	68	45	12	---	184	41	29	407	8.0	2.8	6.4
30	139	53	40	12	---	504	36	30	182	6.9	3.1	5.2
31	98	---	35	13	---	1830	---	102	---	6.7	3.1	---
TOTAL	5371	2116	1577	1742	2501	14261	8816	1016	3123	497.9	163.1	129.3
MEAN	173	70.5	50.9	56.2	89.3	460	294	32.8	104	16.1	5.26	4.31
MAX	2670	149	230	495	400	1830	1720	122	654	57	12	8.6
MIN	19	40	22	12	20	26	36	18	22	6.7	2.8	2.0
CFSM	2.92	1.19	.86	.95	1.51	7.77	4.97	.55	1.76	.27	.09	.07
IN.	3.37	1.33	.99	1.09	1.57	8.96	5.54	.64	1.96	.31	.10	.08

CAL YR 1981 TOTAL 25015.8 MEAN 68.5 MAX 2670 MIN 4.6 CFSM 1.16 IN 15.72
WTR YR 1982 TOTAL 41313.3 MEAN 113 MAX 2670 MIN 2.0 CFSM 1.91 IN 25.96

01350000 SCHOHARIE CREEK AT PRATTSVILLE, NY

LOCATION.--Lat 42°19'15", long 74°26'10", Greene County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) upstream from bridge on State Highway 23 in Prattsville, 0.2 mi (0.3 km) upstream from Schoharie Reservoir, 0.2 mi (0.3 km) downstream from Huntersfield, and 1.6 mi (2.6 km) downstream from Batavia Kill.

DRAINAGE AREA.--236 mi^2 (611 km^2).

PERIOD OF RECORD.--November 1902 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 351: Drainage area. WSP 1432: 1937-38.

GAGE.--Water-stage recorder. Datum of gage is 1,134.98 ft (345.942 m) revised National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1915, nonrecording gage, and Oct. 1, 1915 to July 17, 1936, water-stage recorder, at old highway bridge 80 ft (24 m) upstream, and July 18, 1936 to July 15, 1954, water-stage recorder at site 0.2 mi (0.3 km) downstream, all at datum 1.56 ft (0.475 m) lower than present datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--79 years, 462 ft^3/s (13.08 m^3/s), 26.60 in/yr (676 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft^3/s (1,560 m^3/s) Oct. 16, 1955, gage height, 19.14 ft (5.834 m), from rating curve extended above 16,000 ft^3/s (453 m^3/s) on basis of contracted-opening measurement of peak flow, maximum gage height, 19.57 ft (5.965 m) Mar. 5, 1979 (ice jam), minimum daily discharge, 4.8 ft^3/s (0.14 m^3/s) Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,400 ft^3/s (120 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 3	1800	ice jam		*12.73	3.880
Feb. 4	0400	5,320	151	7.05	2.149
Apr. 18	0500	6,990	198	7.85	2.393
June 6	0515	*9,770	277	8.99	2.740

Minimum discharge, 9.3 ft^3/s (0.263 m^3/s) Sept. 20, 21, gage height, 1.61 ft (0.491 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	450	200	330	490	140	1750	501	194	672	52	16
2	300	398	368	370	800	100	1190	453	244	467	46	25
3	300	349	373	400	1500	68	1460	423	231	374	47	39
4	254	313	317	500	4000	110	2570	397	194	322	43	35
5	224	287	270	1100	1600	220	1200	352	687	267	81	26
6	209	336	250	700	900	200	660	321	6930	229	78	20
7	220	359	279	520	700	200	500	301	4140	200	55	18
8	213	309	266	390	600	160	2000	277	2140	181	44	15
9	192	296	220	320	440	160	1500	268	1370	158	38	14
10	175	266	200	280	340	220	1000	285	819	137	34	13
11	162	250	200	320	300	320	586	251	587	116	30	12
12	150	235	210	280	270	800	558	229	494	186	27	11
13	135	213	220	280	260	1020	585	220	451	203	25	9.8
14	132	209	220	280	260	1070	858	201	527	147	24	9.4
15	127	231	210	280	300	776	779	183	412	135	23	13
16	121	313	180	240	320	661	782	170	373	116	21	16
17	116	287	150	200	290	649	1260	158	552	104	23	12
18	111	283	160	170	270	677	4330	147	425	86	29	11
19	132	271	170	140	260	764	1910	140	333	81	26	9.8
20	135	326	180	180	240	649	1380	136	294	94	23	9.3
21	119	428	200	210	220	747	1290	130	255	97	25	9.3
22	111	364	300	180	210	764	1030	118	227	78	24	11
23	121	326	450	220	200	688	814	165	288	67	21	14
24	313	304	620	160	150	666	688	229	300	60	18	22
25	266	275	500	140	110	768	633	211	221	53	18	22
26	266	254	500	110	140	1670	664	171	181	45	19	17
27	504	275	600	120	140	1200	1240	145	163	43	19	24
28	1360	271	350	120	120	771	882	130	264	77	17	46
29	897	247	340	260	---	665	675	160	1160	109	14	39
30	650	220	320	150	---	651	567	190	1540	70	13	29
31	527	---	310	220	---	984	---	171	---	56	12	---
TOTAL	8714	8945	9133	9170	15430	18538	35341	7233	25996	5030	969	567.6
MEAN	281	298	295	296	551	598	1178	233	867	162	31.3	18.9
MAX	1360	450	620	1100	4000	1670	4330	501	6930	672	81	46
MIN	111	209	150	110	110	68	500	118	163	43	12	9.3
CFSM	1.19	1.26	1.25	1.25	2.34	2.53	4.99	.99	3.67	.69	.13	.08
IN.	1.37	1.41	1.44	1.45	2.43	2.92	5.57	1.14	4.10	.79	.15	.09

CAL YR 1981 TOTAL 137412.0 MEAN 376 MAX 8240 MIN 19 CFSM 1.59 IN 21.66
WTR YR 1982 TOTAL 145066.6 MEAN 397 MAX 6930 MIN 9.3 CFSM 1.68 IN 22.87

01350100 SCHOHARIE RESERVOIR NEAR GRAND GORGE, NY

LOCATION.--Lat 42°21'21", long 74°26'42", Schoharie County, Hydrologic Unit 02020005, in Shandaken Tunnel intake house on Intake Road, 1.6 mi (2.6 km) north of junction of Intake Road and State Highway 23, 2.5 mi (4.0 km) upstream from Gilboa Dam, and 2.6 mi (4.2 km) east of Grand Gorge.

DRAINAGE AREA.--314 mi^2 (813 km^2).

PERIOD OF RECORD.--January 1973 to current year. Monthly contents only published as "at Gilboa" for September 1928 to December 1972.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

REMARKS.--Reservoir is formed by masonry and earth dam. Storage began July 24, 1926. Usable capacity 19,583 mil gal (74.12 hm^3) between minimum operating level, elevation, 1,050.00 ft (320.040 m), and crest of spillway, elevation, 1,130.00 ft (344.424 m). Dead storage below elevation 1,050.00 (320.040 m), 1,968 mil gal (7.449 hm^3). Figures given herein represent usable contents. Reservoir impounds water except for periods of spilling, for diversion through Shandaken Tunnel into Esopus Creek to Ashokan Reservoir, for New York City water supply.

COOPERATION.--Capacity table furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 1,135.17 ft (346.000 m) Oct. 16, 1955, contents, 23,566 mil gal (89.20 hm^3), minimum observed (after initial filling), 1,062.00 ft (323.698 m) Aug. 20, 1970, contents, 1,520 mil gal (5.753 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,131.77 ft (344.963 m) June 6, contents, 20,271 mil gal (76.73 hm^3); minimum observed, 1,078.14 ft (328.617 m) Feb. 1, contents, 4,555 mil gal (17.24 hm^3).

Capacity table (elevation, in feet, and usable contents in million gallons).

1,063.0	1,672	1,120.0	16,100
1,080.0	4,969	1,133.0	20,700

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1086.74	1102.53	1099.90	1094.17	1078.63	1112.31	1130.34	1130.34	1129.56	1130.33	1122.68	1108.50
2	1086.95	1103.63	1099.81	1093.58	1080.92	1112.14	1130.29	1130.33	1129.71	1130.21	1122.33	1108.08
3	1087.42	1103.84	1100.01	1092.76	1083.95	1111.88	1130.45	1130.34	1129.91	1130.14	1121.97	1107.66
4	1087.74	1103.76	1100.06	1092.48	1093.20	1111.52	1130.80	1130.38	1129.89	1130.09	1121.62	1107.21
5	1087.91	1103.61	1100.00	1096.59	1100.20	1111.36	1130.43	1130.35	1129.45	1130.05	1121.28	1106.77
6	1088.04	1103.50	1099.82	1098.50	1103.76	1111.42	1130.38	1130.34	1131.37	1130.01	1120.98	1106.31
7	1088.19	1103.64	1099.48	1099.16	1105.92	1111.40	1130.10	1130.32	1131.13	1129.98	1120.65	1105.84
8	1088.39	1103.64	1099.31	1099.24	1107.41	1111.40	1129.85	1130.31	1130.72	1129.95	1120.27	1105.36
9	1088.53	1103.54	1099.12	1098.73	1108.64	1111.27	1130.35	1130.34	1130.53	1129.79	1119.92	1104.89
10	1088.59	1103.36	1098.80	1097.98	1109.53	1111.15	1130.35	1130.35	1130.39	1129.15	1119.54	1104.43
11	1088.59	1103.10	1098.42	1096.84	1109.97	1111.21	1130.35	1130.25	1130.32	1128.39	1119.14	1103.95
12	1088.55	1102.83	1098.10	1095.72	1110.37	1113.12	1130.36	1130.12	1130.28	1127.74	1118.73	1103.48
13	1088.47	1102.49	1097.74	1094.53	1110.83	1115.34	1130.36	1130.07	1130.25	1127.63	1118.33	1103.00
14	1088.36	1102.10	1097.33	1093.41	1111.14	1117.78	1130.50	1130.04	1130.31	1127.54	1117.91	1102.54
15	1088.23	1101.75	1097.00	1092.34	1111.41	1119.49	1130.42	1130.00	1130.27	1127.40	1117.51	1102.09
16	1088.10	1101.61	1096.65	1091.25	1111.93	1120.71	1130.46	1129.92	1130.25	1127.20	1117.12	1101.68
17	1087.94	1101.50	1096.21	1090.06	1112.50	1121.79	1130.50	1129.86	1130.39	1126.97	1116.72	1101.16
18	1087.75	1101.35	1095.88	1088.77	1112.73	1122.84	1130.59	1129.78	1130.36	1126.73	1116.32	1100.14
19	1087.61	1101.20	1095.44	1087.49	1112.90	1124.27	1130.68	1129.67	1130.30	1126.44	1115.92	1099.02
20	1087.50	1101.06	1094.94	1086.51	1113.07	1125.37	1130.57	1129.56	1130.28	1126.16	1115.47	1097.98
21	1087.36	1101.30	1094.45	1085.87	1113.17	1126.53	1130.53	1129.51	1130.21	1125.89	1114.72	1097.40
22	1087.20	1101.49	1094.04	1085.18	1113.23	1127.81	1130.50	1129.39	1130.09	1125.60	1113.79	1096.97
23	1087.06	1101.51	1093.91	1084.46	1113.26	1128.55	1130.46	1129.32	1130.11	1125.28	1113.00	1096.50
24	1087.63	1101.45	1094.83	1083.82	1113.25	1128.86	1130.44	1129.52	1130.13	1124.94	1112.41	1096.03
25	1088.56	1101.31	1095.42	1083.13	1113.12	1129.20	1130.42	1129.64	1130.09	1124.58	1111.94	1095.56
26	1089.35	1101.06	1095.56	1082.42	1112.86	1130.10	1130.37	1129.65	1130.03	1124.22	1111.47	1095.09
27	1090.65	1100.86	1095.62	1081.62	1112.69	1130.33	1130.59	1129.62	1129.98	1123.85	1110.99	1094.67
28	1093.68	1100.73	1095.67	1080.83	1112.54	1130.14	1130.51	1129.53	1130.07	1123.62	1110.48	1094.26
29	1097.21	1100.54	1095.66	1080.06	---	1130.11	1130.40	1129.48	1130.37	1123.57	1109.97	1093.87
30	1099.44	1100.25	1095.54	1079.25	---	1130.09	1130.35	1129.49	1130.66	1123.33	1109.47	1093.44
31	1101.13	---	1094.90	1078.52	---	1130.22	---	1129.51	---	1123.03	1108.98	---
MEAN	1089.32	1102.15	1097.08	1089.85	1106.90	1120.31	1130.42	1129.91	1130.25	1127.09	1116.50	1101.13
MAX	1101.13	1103.84	1100.06	1099.24	1113.26	1130.33	1130.80	1130.38	1131.37	1130.33	1122.68	1108.50
MIN	1086.74	1100.25	1093.91	1078.52	1078.63	1111.15	1129.85	1129.32	1129.45	1123.03	1108.98	1093.44
‡	10,612	10,105	8,577	4,589	13,714	19,750	19,715	19,415	19,738	17,057	12,594	8,250
‡‡	+200	-26.1	-76.3	-199	+504	+301	-1.81	-15.0	+16.7	-134	-223	-224

CAL YR 1981 MEAN 1097.72 MAX 1131.11 MIN 1071.18 ‡‡ +22.3
WTR YR 1982 MEAN 1111.74 MAX 1131.37 MIN 1078.52 ‡‡ +7.00

‡ Contents in million gallons, at 2400 hours on last day of month.
‡‡ Change in contents, equivalent in cubic feet per second.

Note.--Elevations for Jan. 24 to Feb. 10, and Apr. 15-21 are based on readings furnished by Department of Environmental Protection, City of New York.

01350101 SCHOHARIE CREEK AT GILBOA, NY

LOCATION.--Lat 42°23'50", long 74°27'03", Schoharie County, Hydrologic Unit 02020005, on left bank, 200 ft (61 m) upstream from bridge on County Highway 322, 0.2 mi (0.3 km) west of village of Gilboa, 0.4 mi (0.6 km) downstream from dam on Schoharie Reservoir, and 0.8 mi (1.3 km) upstream from the Platter Kill.

DRAINAGE AREA.--314 mi^2 (813 km^2).

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 939.56 ft (286.378 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those under 20 ft^3/s. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, Mar. 26 to May 15, and June 5-26 and June 28 to July 6, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of city of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,500 ft^3/s (1,320 m^3/s) Mar. 21, 1980 determined by flow over dam computations at Schoharie Reservoir dam, gage height, 28.6 ft (8.72 m) from floodmarks, minimum daily, 0.04 ft^3/s (0.001 m^3/s) on many days, June to October 1976, and Sept. 11-13, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s (906 m^3/s) Mar. 18, 1936, from information furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,000 ft^3/s (283 m^3/s) June 6, gage height, 17.77 ft (5.42 m), minimum observed, 0.09 ft^3/s (0.003 m^3/s) Feb. 9, but may have been less during period of ice effect Jan 8-31 and Feb. 7-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.38	.45	.35	.80	.18	1480	590	1.7	690	.33	.31
2	.41	.38	.69	.35	1.1	.30	859	536	1.7	380	.33	.36
3	.36	.41	.59	.38	3.5	.40	968	497	8.0	240	.36	.45
4	.31	.41	.50	2.3	3.0	.60	3030	463	21	157	.33	.31
5	.26	.41	.45	1.5	.80	1.0	1120	424	1.5	90	.33	.28
6	.26	.54	.45	.74	.40	2.5	754	380	7370	39	.33	.26
7	.31	.64	.45	.50	.20	.50	497	358	5150	12	.31	.26
8	.33	.54	.45	.35	.13	.45	699	322	2690	2.3	.31	.24
9	.33	.50	.45	.25	.09	.45	643	310	1700	.74	.33	.24
10	.31	.45	.41	.20	.10	.43	603	325	1050	.45	.38	.22
11	.26	.45	.41	.15	.10	.42	540	233	719	.38	.36	.24
12	.24	.45	.41	.13	.10	.42	512	71	621	.38	.31	.22
13	.22	.41	.41	.12	.10	.42	459	37	540	.36	.31	.24
14	.22	.41	.41	.12	.10	.44	837	18	657	.33	.31	.22
15	.22	.45	.40	.12	.12	.60	754	5.9	512	.33	.31	.31
16	.22	.50	.35	.12	.20	.85	699	2.0	459	.33	.31	.50
17	.22	.45	.33	.12	.15	.96	1100	.74	764	.31	.31	.28
18	.22	.50	.31	.12	.13	1.5	5660	.50	586	.31	.31	.22
19	.26	.50	.30	.12	.11	1.3	2650	.50	445	.31	.31	.20
20	.26	.69	.28	.12	.10	1.1	1830	.79	371	.38	.31	.18
21	.24	.74	.27	.11	.10	1.1	1650	.69	276	.36	.33	.20
22	.24	.59	.26	.11	.10	1.1	1350	.50	90	.31	.28	.18
23	.31	.50	1.0	.10	.10	2.0	1030	.85	127	.28	.28	.22
24	.50	.50	.70	.11	.10	.90	892	.90	136	.28	.28	.26
25	.38	.45	.50	.12	.10	.90	789	.69	77	.28	.31	.20
26	.38	.41	.40	.12	.10	784	789	.64	23	.28	.31	.13
27	.79	.50	.35	.12	.11	865	1410	.64	5.3	.28	.26	.33
28	2.3	.45	.35	.13	.13	258	1100	.69	66	1.0	.26	.36
29	.74	.45	.35	.13	---	139	832	1.0	921	.64	.24	.24
30	.45	.41	.20	.15	---	86	685	.79	2270	.38	.26	.20
31	.38	---	.20	.20	---	365	---	.85	---	.33	.26	---
TOTAL	12.21	14.47	13.08	9.56	12.17	2517.82	36221	4582.67	27659.2	1619.33	9.56	7.86
MEAN	.39	.48	.42	.31	.43	81.2	1207	148	922	52.2	.31	.26
MAX	2.3	.74	1.0	2.3	3.5	865	5660	590	7370	690	.38	.50
MIN	.22	.38	.20	.10	.09	.18	459	.50	1.5	.28	.24	.13

CAL YR 1981 TOTAL 19736.30 MEAN 54.1 MAX 5700 MIN .09
WTR YR 1982 TOTAL 72678.93 MEAN 199 MAX 7370 MIN .09

01350120 PLATTER KILL AT GILBOA, NY

LOCATION.--Lat 42°24'18", long 74°26'36", Schoharie County, Hydrologic Unit 02020005, on right bank, 190 ft (58 m) upstream from culvert on County Highway 17, 0.5 mi (0.8 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Gilboa.

DRAINAGE AREA.--11.1 mi² (28.7 km²).

PERIOD OF RECORD.--January 1975 to current year. Occasional discharge measurements, water years 1969-73.

GAGE.--Water-stage recorder. Concrete control since Nov. 12, 1976. Altitude of gage is 1,110 ft (338 m), from topographic map.

REMARKS.--Records fair, except for winter periods and period of plugged intake, Aug. 28 to Sept. 22, which are poor.

AVERAGE DISCHARGE.--7 years, 16.4 ft³/s (0.464 m³/s), 20.06 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 690 ft³/s (19.5 m³/s) Oct. 17, 1977, gage height, 4.54 ft (1.384 m), maximum gage height, 4.84 ft (1.475 m) Feb. 12, 1982 (ice jam); minimum discharge, 0.32 ft³/s (0.009 m³/s) Nov. 18, 1980 (result of freezeup); minimum gage height (subsequent to concrete control installation), 0.76 ft (0.232 m) Nov. 18, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft³/s (2.46 m³/s) April 4, gage height, 2.42 ft (0.738 m), no peak above base of 150 ft³/s (4.25 m³/s), maximum gage height, 4.84 ft (1.475 m) Feb. 12, (ice jam), minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	6.9	7.4	9.7	3.5	8.2	56	12	9.3	27	3.5	1.7
2	4.2	6.6	11	10	5.0	8.1	45	11	14	21	3.4	1.9
3	3.2	6.1	11	19	15	6.9	49	11	10	17	3.3	2.1
4	2.8	5.7	9.7	23	50	6.6	63	10	8.2	15	3.2	1.8
5	2.6	5.4	9.0	42	35	13	47	9.7	12	13	3.0	1.3
6	2.8	7.2	8.3	28	30	8.2	39	9.0	40	12	2.8	1.2
7	3.6	7.2	7.7	21	26	7.7	33	8.9	43	10	2.7	1.1
8	3.7	6.9	8.0	18	24	7.4	37	8.4	32	9.7	2.6	1.1
9	3.4	6.6	8.0	15	22	7.0	31	8.7	23	8.7	2.7	1.1
10	3.3	6.4	7.7	14	20	6.9	29	8.7	18	7.7	2.9	1.1
11	3.2	6.1	7.4	13	18	21	27	7.7	15	7.1	2.5	1.0
12	3.1	5.4	7.4	14	17	38	26	7.6	14	7.1	2.3	1.0
13	3.0	5.2	7.2	19	15	42	28	7.4	16	6.6	2.3	.90
14	2.8	5.0	7.2	16	14	45	34	6.6	18	5.9	2.2	.90
15	2.7	5.4	7.2	12	14	34	28	6.3	14	5.4	2.2	1.1
16	2.6	5.9	7.2	10	16	28	27	6.0	16	5.1	2.1	1.5
17	2.5	5.7	6.6	8.0	15	27	33	5.8	26	4.7	2.1	1.3
18	2.6	6.4	6.4	6.0	13	31	54	5.4	19	4.5	2.0	1.2
19	2.8	6.4	6.4	5.0	12	35	43	5.4	14	4.2	2.0	1.1
20	2.5	8.7	6.8	4.0	12	32	37	6.2	13	4.9	2.1	1.1
21	2.4	9.7	7.4	3.5	11	37	33	5.7	12	4.3	1.9	1.1
22	2.4	9.3	8.7	3.2	10	39	29	5.1	11	3.7	1.8	1.3
23	4.1	8.7	14	3.0	9.8	38	25	11	15	3.5	1.5	1.8
24	4.6	8.3	15	2.9	9.2	37	22	11	11	3.3	1.2	1.3
25	3.2	7.4	12	2.8	9.0	42	19	9.1	9.5	3.1	2.0	1.2
26	4.4	7.4	11	2.8	8.8	57	19	7.5	9.2	3.0	1.8	1.2
27	6.6	8.0	10	2.8	8.6	49	19	6.5	9.4	2.9	1.3	2.6
28	17	8.3	10	2.8	8.4	40	16	6.1	17	9.6	1.2	1.6
29	12	8.0	9.7	2.8	---	34	14	7.5	39	6.2	1.1	1.3
30	8.7	7.7	9.0	2.8	---	33	13	6.6	46	4.5	1.0	1.2
31	7.4	---	13	3.0	---	44	---	8.7	---	3.8	1.0	---
TOTAL	133.3	208.0	277.4	339.1	451.3	863.0	975	246.6	553.6	244.5	67.7	40.10
MEAN	4.30	6.93	8.95	10.9	16.1	27.8	32.5	7.95	18.5	7.89	2.18	1.34
MAX	17	9.7	15	42	50	57	63	12	46	27	3.5	2.6
MIN	2.4	5.0	6.4	2.8	3.5	6.6	13	5.1	8.2	2.9	1.0	.90
CFSM	.39	.62	.81	.98	1.45	2.51	2.93	.72	1.67	.71	.20	.12
IN.	.45	.70	.93	1.14	1.51	2.89	3.27	.83	1.86	.82	.23	.13

CAL YR 1981 TOTAL 3475.00 MEAN 9.52 MAX 190 MIN 1.3 CFSM .86 IN 11.64
WTR YR 1982 TOTAL 4399.60 MEAN 12.1 MAX 63 MIN .90 CFSM 1.09 IN 14.74

01350140 MINE KILL NEAR NORTH BLENHEIM, NY

LOCATION.--Lat 42°25'44", long 74°28'24", Schoharie County, Hydrologic Unit 02020005, on left bank 200 ft (61 m) upstream from bridge on State Highway 30, 0.6 mi (1.0 km) upstream from mouth, and 3.0 mi (4.8 km) southwest of North Blenheim.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

PERIOD OF RECORD.--December 1974 to current year. Occasional discharge measurements, water years 1969-74.

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1975. Altitude of gage is 1,060 ft (323 m), from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--7 years (1976-82), 26.4 ft³/s (0.748 m³/s), 21.99 in/yr (559 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) Mar. 14, 1977, gage height, 3.41 ft (1.039 m); maximum gage height, 3.60 ft (1.097 m) Feb. 2, 1981 (ice jam); minimum discharge, 0.10 ft³/s (0.003 m³/s) Aug. 27-30, 1980, gage height, 0.49 ft (0.149 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge 441 ft³/s (12.5 m³/s) Apr. 3, gage height, 2.50 ft (0.762 m), no peak above base of 550 ft³/s (15.6 m³/s); maximum gage height, 3.32 ft (1.012 m) Feb. 3 (ice jam); minimum discharge, 0.12 ft³/s (0.003 m³/s) Sept. 12, 13, 14, 15, gage height, 0.54 ft (0.165 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	23	20	25	15	9.6	132	19	26	29	4.1	.15
2	17	20	50	20	45	9.4	78	16	60	22	3.7	.31
3	13	18	45	25	150	9.0	132	15	31	20	3.3	.31
4	10	14	35	100	90	11	137	13	26	19	3.3	.25
5	8.0	12	25	80	60	14	73	12	65	18	4.1	.15
6	6.0	20	22	70	50	11	57	10	170	11	3.7	.15
7	10	23	20	60	40	9.0	51	10	87	8.9	2.7	.14
8	12	20	19	45	35	8.4	57	8.9	57	7.6	1.8	.14
9	9.0	17	18	35	31	8.2	53	8.9	41	7.6	1.3	.14
10	7.0	15	17	25	29	8.0	48	9.6	31	5.6	1.2	.14
11	6.0	14	17	16	26	20	43	7.6	25	4.5	1.2	.13
12	5.0	12	16	17	24	100	41	6.3	21	5.0	.88	.13
13	4.7	9.6	15	20	22	90	51	6.3	23	5.0	.75	.12
14	4.0	8.9	14	13	21	70	60	5.6	29	3.7	.55	.12
15	4.0	8.9	14	12	20	65	48	4.5	19	3.3	.64	.19
16	3.7	12	14	11	23	55	48	4.1	20	3.0	.46	.55
17	3.5	13	13	10	20	53	53	3.7	41	2.0	.38	.31
18	3.4	15	13	9.4	18	67	123	3.3	22	1.6	.46	.15
19	4.0	18	13	8.6	16	62	65	3.0	16	2.0	.46	.15
20	4.0	30	12	8.0	15	60	53	4.1	13	2.0	.31	.14
21	3.8	30	12	7.6	14	65	49	5.0	11	3.3	.31	.14
22	3.5	25	20	7.4	13	71	41	3.3	9.6	2.7	.25	.15
23	5.0	20	60	7.2	12	76	38	25	13	1.2	.25	.38
24	10	18	40	7.0	12	62	32	29	8.9	.75	.19	.88
25	8.0	17	25	6.8	11	80	29	20	7.0	.55	.38	.46
26	15	17	20	6.6	11	156	29	11	6.3	.46	.88	.25
27	60	20	15	6.4	10	80	29	8.2	5.6	.38	.46	.38
28	150	22	13	6.4	10	59	26	7.0	15	16	.31	.64
29	48	20	12	6.2	---	57	23	15	87	8.2	.19	.38
30	36	17	11	6.0	---	53	20	15	60	4.5	.15	.31
31	26	---	15	6.0	---	109	---	31	---	4.5	.15	---
TOTAL	514.6	529.4	655	683.6	843	1607.6	1719	340.4	1046.4	223.34	38.81	7.84
MEAN	16.6	17.6	21.1	22.1	30.1	51.9	57.3	11.0	34.9	7.20	1.25	.26
MAX	150	30	60	100	150	156	137	31	170	29	4.1	.88
MIN	3.4	8.9	11	6.0	10	8.0	20	3.0	5.6	.38	.15	.12
CFSM	1.02	1.08	1.29	1.36	1.85	3.18	3.52	.68	2.14	.44	.08	.02
IN.	1.17	1.21	1.49	1.56	1.92	3.67	3.92	.78	2.39	.51	.09	.02

CAL YR 1981 TOTAL 7178.88 MEAN 19.7 MAX 450 MIN .11 CFSM 1.21 IN 16.38
WTR YR 1982 TOTAL 8208.99 MEAN 22.5 MAX 220 MIN .12 CFSM 1.38 IN 18.73

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°27'57", long 74°27'45", Schoharie County, Hydrologic Unit 02020005, on left bank 2300 ft (701 m) upstream from West Kill, and 1.2 mi (1.9 km) upstream from bridge on State Highway 30 in North Blenheim. Water-quality sampling site at discharge station.

DRAINAGE AREA.--359 mi^3 (930 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year. Occasional measurements, water years 1969-70.

GAGE.--Water-stage recorder. Altitude of gage is 800 ft (244 m), from topographic map. Prior to Oct. 1, 1971, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those during winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project immediately upstream from gage. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--12 years, 489 ft^3/s (13.85 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,900 ft^3/s (1,210 m^3/s) Mar. 21, 1980, gage height, 14.72 ft (4.487 m) from floodmark, from rating curve extended above 14,000 ft^3/s (396 m^3/s); minimum no flow Oct. 21-28, 1972, Sept. 12-14, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,810 ft^3/s (278 m^3/s) June 6, gage height, 10.07 ft (3.069 m); minimum 3.4 ft^3/s (0.10 m^3/s) Sept. 19, 22, gage height 0.97 ft (0.296 m); minimum daily, 4.0 ft^3/s (0.11 m^3/s) Sept. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	39	19	32	35	26	1620	581	135	817	7.5	7.2
2	8.5	16	45	30	80	19	1130	519	123	373	7.8	7.5
3	8.5	14	60	29	245	15	868	564	57	332	6.8	7.9
4	7.8	25	26	194	500	16	3190	482	91	183	6.8	7.5
5	7.1	14	23	293	135	20	1320	400	107	151	7.1	6.5
6	4.9	15	22	32	142	16	958	391	7180	67	7.1	6.5
7	5.1	31	20	50	105	105	541	360	5600	45	7.5	6.8
8	5.1	57	18	35	55	25	874	364	2770	25	7.1	6.8
9	5.1	65	20	25	70	13	730	265	1690	25	7.8	6.5
10	5.4	15	18	20	63	8.5	700	352	1090	23	7.1	6.8
11	5.1	15	16	18	56	45	687	239	746	11	6.8	7.1
12	7.8	15	15	17	86	262	713	129	661	11	7.1	6.8
13	8.5	15	16	17	29	232	472	103	575	11	7.5	5.9
14	8.5	16	18	16	33	186	915	43	789	11	7.5	4.4
15	8.5	21	16	30	68	149	909	22	519	9.7	6.8	4.4
16	8.9	29	15	35	47	76	778	11	552	7.8	7.1	4.2
17	9.3	32	20	33	47	146	946	8.5	857	7.5	6.8	4.0
18	10	16	17	33	55	99	5220	8.2	635	6.8	7.1	4.2
19	10	14	21	35	39	186	2960	8.2	508	6.8	7.1	4.2
20	10	25	19	30	25	68	2020	8.2	382	6.8	7.5	4.4
21	11	76	18	23	30	138	1550	8.5	336	6.5	7.5	4.4
22	12	79	10	13	71	178	1380	8.5	91	6.5	6.8	4.2
23	10	42	117	13	29	117	1100	52	181	6.8	6.8	4.7
24	9.4	15	99	15	19	111	927	74	200	6.8	6.2	4.2
25	8.4	15	15	18	18	125	851	34	123	6.5	7.1	4.4
26	8.8	11	65	22	11	995	868	30	55	7.1	6.8	4.4
27	11	8.2	68	17	10	1140	1350	26	38	7.8	6.8	5.4
28	15	22	38	14	17	286	983	8.9	89	11	6.5	4.9
29	12	71	26	12	---	324	851	7.5	840	11	5.9	4.9
30	10	29	30	11	---	200	741	6.8	2380	7.1	6.5	4.9
31	43	---	31	10	---	447	---	8.2	---	7.1	6.5	---
TOTAL	303.2	857.2	961	1172	2120	5773.5	38152	5122.5	29400	2214.6	217.3	166.0
MEAN	9.78	28.6	31.0	37.8	75.7	186	1272	165	980	71.4	7.01	5.53
MAX	15	79	117	293	500	1140	5220	581	7180	817	7.8	7.9
MIN	4.9	8.2	10	10	10	8.5	472	6.8	38	6.5	5.9	4.0

CAL YR 1981 TOTAL 35664.5 MEAN 97.7 MAX 5980 MIN 4.3
WTR YR 1982 TOTAL 86459.3 MEAN 237 MAX 7180 MIN 4.0

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971 to current year.
CHEMICAL DATA: 1971-72 (a), 1975-76 (d).
NUTRIENT DATA: 1971 (a), 1975-76 (d).
BIOLOGICAL DATA:
Bacteria--1975-76 (d).
SEDIMENT DATA: 1975-76 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1971 to current year.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record July 1 to Sept. 30, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1973-76, 80-81), 33.5°C Aug. 7, 1973; minimum, freezing point on many days during winter periods, except water years 1978-80.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.0	11.0	11.5	12.0	8.5	10.5	4.0	2.5	3.0	2.5	1.5	2.0
2	14.5	11.5	13.0	14.0	9.0	11.0	6.0	4.0	5.0	2.0	.0	1.0
3	14.0	11.5	12.5	12.5	8.0	9.5	6.0	5.0	5.5	1.0	.0	.5
4	17.0	11.5	13.5	11.5	7.5	9.5	5.5	3.5	4.5	2.0	1.0	1.5
5	15.5	13.0	14.0	12.5	8.0	10.0	5.0	4.0	4.5	2.0	1.0	1.5
6	15.5	13.5	14.0	11.5	9.5	10.5	4.0	2.0	3.0	1.5	.5	1.0
7	14.0	11.5	13.0	9.5	8.0	8.5	4.0	1.5	3.0	2.0	.5	1.5
8	14.0	10.5	12.0	11.0	8.0	9.5	3.5	3.0	3.5	1.0	.0	.5
9	12.5	9.5	11.0	10.5	7.5	9.5	3.0	2.0	2.5	1.0	.0	.5
10	16.0	9.0	11.5	9.0	5.5	7.5	2.5	1.5	2.0	.5	.0	.0
11	16.5	9.0	11.5	9.5	7.0	8.0	2.5	1.5	2.0	.0	.0	.0
12	16.0	8.5	11.0	8.5	5.0	6.0	3.0	2.0	2.5	.0	.0	.0
13	16.5	8.5	11.5	8.5	4.0	5.5	3.5	1.5	2.5	.0	.0	.0
14	17.0	8.0	11.5	9.0	5.0	6.5	3.0	2.0	2.5	.0	.0	.0
15	15.5	9.0	11.5	8.0	6.5	7.5	3.0	1.5	2.5	.0	.0	.0
16	15.0	10.0	12.0	9.0	8.0	8.5	2.0	.5	1.5	.0	.0	.0
17	16.0	8.5	11.0	9.0	8.5	8.5	3.0	1.0	2.0	.0	.0	.0
18	11.0	9.0	10.0	8.5	8.0	8.0	2.0	1.5	1.5	.0	.0	.0
19	10.5	7.5	9.5	8.5	7.5	7.5	1.0	.0	.5	.0	.0	.0
20	13.5	7.0	9.5	8.5	7.5	8.0	1.5	.0	.5	.0	.0	.0
21	15.5	8.5	11.0	8.5	7.5	8.0	.5	.0	.0	.0	.0	.0
22	15.0	10.0	12.0	8.0	7.0	7.5	2.0	.5	1.0	.0	.0	.0
23	13.5	11.0	12.5	7.5	6.5	7.0	2.5	1.5	2.0	.0	.0	.0
24	11.5	7.5	10.0	6.5	4.0	5.5	3.0	1.5	2.5	.0	.0	.0
25	12.0	7.0	9.0	4.0	3.0	3.5	2.5	1.0	1.5	.0	.0	.0
26	12.5	10.0	11.0	6.0	3.0	4.5	2.5	.5	1.5	.0	.0	.0
27	14.5	11.5	12.5	6.5	4.5	5.5	2.0	1.5	1.5	.0	.0	.0
28	13.5	11.0	12.5	5.5	5.0	5.0	3.5	2.0	2.5	.0	.0	.0
29	12.0	9.5	10.5	6.5	4.5	5.5	2.5	1.5	2.0	.0	.0	.0
30	14.0	8.5	10.0	5.5	4.0	4.5	2.5	.5	1.5	.0	.0	.0
31	12.5	8.5	10.0	---	---	---	1.5	.0	1.0	.0	.0	.0
MONTH	17.0	7.0	11.5	14.0	3.0	7.5	6.0	.0	2.5	2.5	.0	.5

01350180 SCHOHARIE CREEK AT NORTH BLENHEIM, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	2.5	.0	1.0	4.0	3.5	3.5	9.0	8.0	8.5
2	1.5	.0	.5	2.5	.5	1.0	4.0	3.0	3.5	10.0	8.5	9.0
3	1.0	.5	1.0	3.0	.0	.5	3.5	3.5	3.5	9.5	8.5	9.0
4	1.5	.5	1.0	.0	.0	.0	3.5	3.0	3.5	10.0	8.5	9.5
5	1.0	.5	1.0	3.5	.0	1.5	3.0	2.5	2.5	11.0	9.0	10.0
6	1.5	.5	1.0	3.0	.0	1.5	2.5	2.0	2.0	10.5	9.5	10.0
7	2.0	.0	.5	2.0	1.0	1.0	2.0	1.5	1.5	11.5	10.0	11.0
8	2.0	.0	1.0	4.5	.0	1.5	2.0	1.5	1.5	12.0	10.5	11.0
9	1.0	.0	.5	1.0	.0	.5	2.0	1.5	1.5	11.0	9.5	10.5
10	2.0	.0	.5	4.5	.0	2.0	2.5	1.5	2.0	11.5	9.5	10.5
11	1.0	.0	.0	5.5	2.0	3.0	2.5	2.0	2.0	14.5	10.5	11.5
12	1.0	.0	.0	2.5	2.0	2.0	2.5	2.0	2.0	12.0	10.5	11.0
13	1.5	.0	.5	3.0	1.5	2.0	3.0	2.0	2.5	14.0	11.0	12.5
14	1.5	.0	1.5	4.0	1.5	2.5	3.0	2.5	2.5	17.0	10.0	13.5
15	2.0	.0	2.0	3.5	1.5	2.5	3.5	2.5	3.0	19.0	10.0	14.5
16	3.0	1.0	2.0	4.5	1.5	2.5	4.0	3.0	3.5	18.0	12.0	15.5
17	1.5	.0	.5	3.0	1.0	2.0	4.5	4.0	4.5	22.0	14.0	17.0
18	3.0	.5	1.5	5.0	2.0	3.0	4.5	4.0	4.5	20.0	13.0	16.5
19	1.0	.5	1.0	2.5	2.5	2.5	4.5	4.0	4.5	21.0	14.0	17.5
20	2.5	.5	1.5	6.5	2.0	3.5	5.0	4.5	5.0	20.0	15.5	17.5
21	3.0	1.0	2.0	3.0	2.5	3.0	5.5	5.0	5.5	22.0	15.0	17.5
22	3.5	1.0	1.5	4.0	2.5	3.0	5.5	5.5	5.5	17.0	13.5	15.0
23	3.5	1.0	2.0	5.0	2.5	3.5	6.0	5.0	5.5	13.5	11.5	12.5
24	1.5	.5	1.0	5.5	2.5	3.5	6.5	5.5	6.0	14.0	11.5	13.0
25	2.5	.0	.5	6.0	2.5	4.0	7.5	6.0	7.0	15.0	12.5	13.5
26	2.0	.0	.5	4.0	3.5	3.5	7.0	6.5	7.0	20.0	12.0	16.0
27	3.0	.0	1.0	4.0	3.5	3.5	7.5	6.5	7.0	22.5	14.5	17.5
28	3.0	.0	1.0	5.5	3.0	3.5	7.5	7.0	7.5	18.5	14.5	16.5
29	---	---	---	5.0	3.0	3.5	8.0	7.5	8.0	18.5	15.5	16.5
30	---	---	---	5.0	2.5	3.5	8.5	7.5	8.0	25.0	15.5	19.5
31	---	---	---	4.0	3.0	3.5	---	---	---	19.5	16.5	18.5
MONTH	3.5	.0	1.0	6.5	.0	2.5	8.5	1.5	4.0	25.0	8.0	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	14.5	15.5									
2	17.0	14.5	15.5									
3	16.5	13.5	15.5									
4	19.0	14.5	16.0									
5	16.0	15.5	15.5									
6	17.0	16.0	17.0									
7	16.0	15.5	16.0									
8	16.0	15.0	15.5									
9	16.0	15.5	16.0									
10	17.0	16.0	16.5									
11	16.5	16.0	16.5									
12	17.5	16.0	16.5									
13	16.5	16.0	16.5									
14	16.5	16.0	16.5									
15	17.5	16.0	16.5									
16	17.0	16.5	17.0									
17	17.0	16.5	17.0									
18	18.0	17.0	17.5									
19	18.5	17.0	18.0									
20	18.5	17.0	17.5									
21	19.0	14.5	16.5									
22	18.0	15.0	16.0									
23	18.5	16.0	17.0									
24	21.0	16.5	18.0									
25	19.5	16.5	18.0									
26	21.5	16.5	19.0									
27	20.5	18.0	18.5									
28	20.0	18.5	19.0									
29	20.0	19.5	20.0									
30	20.5	18.5	19.5									
31	---	---	---									
MONTH	21.5	13.5	17.0									

HUDSON RIVER BASIN

01350200 WEST KILL AT NORTH BLENHEIM, NY

LOCATION.--Lat 42°28'07", long 74°27'34", Schoharie County, Hydrologic Unit 02020005, on left bank 75 ft (23 m) upstream from highway bridge on State Highway 30, in North Blenheim, 100 ft (30 m) downstream from Mill Creek and 0.2 mi (0.3 km) upstream from mouth.

DRAINAGE AREA.--44.6 mi^2 (115.5 km^2).

PERIOD OF RECORD.--July 1975 to current year. Occasional discharge measurements, water years 1970-72.

GAGE.--Water-stage recorder. Altitude of gage is 810 ft (247 m), from topographic map.

REMARKS.--Records good, except those for winter periods, which are poor.

AVERAGE DISCHARGE.--7 years, 87.9 ft^3/s (2.489 m^3/s), 26.77 in/yr (680 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,100 ft^3/s (343 m^3/s) Oct. 18, 1975, gage height, 5.91 ft (1.801 m) from rating curve extended above 2,700 ft^3/s (76 m^3/s); maximum gage height, 7.82 ft (2.384 m) Oct. 17, 1977, minimum discharge, 0.53 ft^3/s (0.015 m^3/s) Aug. 28-30, 1980; minimum gage height, 0.68 ft (0.207 m) July 25, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1,600 ft^3/s (45.3 m^3/s) Apr. 3, gage height 5.00 ft (1.524 m), no peak above base of 2,000 ft^3/s (56.6 m^3/s), maximum gage height 6.83 ft (2.082 m) Feb. 4 (ice jam); minimum discharge, 0.54 ft^3/s (0.015 m^3/s) Sept. 13, 14, gage height 1.97 ft (0.600 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	68	42	62	60	40	696	44	65	70	11	1.3
2	15	58	106	46	180	41	351	41	121	53	11	2.0
3	14	49	89	50	400	41	520	39	73	44	12	2.4
4	13	43	74	146	240	47	578	36	67	40	10	1.8
5	11	38	68	200	190	110	276	33	148	33	9.5	1.5
6	10	52	61	115	160	130	199	31	508	27	8.1	1.3
7	18	62	52	92	140	92	165	30	300	23	6.7	1.1
8	28	51	49	74	120	76	148	27	195	22	5.6	.96
9	22	50	47	60	100	66	131	29	137	19	6.2	.86
10	17	42	45	52	90	58	119	32	103	17	9.1	.86
11	14	39	43	45	80	58	112	27	85	15	6.7	.77
12	13	35	41	42	74	150	105	24	74	17	4.3	.68
13	12	32	39	38	68	290	126	24	74	15	3.5	.61
14	11	31	37	35	64	280	153	21	105	13	3.2	.54
15	10	32	35	32	60	201	131	20	65	9.8	2.9	.77
16	9.6	34	34	30	56	164	142	18	58	11	2.4	2.2
17	9.1	31	34	28	52	154	206	17	110	10	2.0	1.8
18	8.9	35	33	26	50	173	431	16	73	9.4	2.2	1.3
19	11	35	32	24	48	180	210	16	54	6.8	1.8	1.2
20	11	46	32	23	46	181	165	18	49	10	1.6	1.1
21	9.8	62	32	21	45	203	145	16	41	13	1.6	1.3
22	8.4	53	33	20	43	232	119	15	36	9.8	1.6	1.3
23	11	47	140	19	42	215	103	39	41	7.4	1.5	2.4
24	32	44	110	18	41	225	89	70	32	5.6	1.3	3.9
25	20	46	83	18	40	313	78	49	27	4.3	2.2	2.7
26	22	44	69	17	39	571	74	34	24	3.5	3.9	2.0
27	106	58	66	16	39	307	78	27	23	3.2	2.4	2.7
28	555	60	65	16	39	214	65	25	46	69	1.8	2.9
29	158	50	56	15	---	184	55	45	207	41	1.3	2.4
30	105	45	49	15	---	202	50	44	150	18	1.2	2.0
31	81	---	45	16	---	530	---	65	---	13	1.1	---
TOTAL	1374.0	1372	1741	1411	2606	5728	5820	972	3091	652.8	139.7	48.65
MEAN	44.3	45.7	56.2	45.5	93.1	185	194	31.4	103	21.1	4.51	1.62
MAX	555	68	140	200	400	571	696	70	508	70	12	3.9
MIN	8.2	31	32	15	39	40	50	15	23	3.2	1.1	.54
CFSM	.99	1.03	1.26	1.02	2.09	4.15	4.35	.70	2.31	.47	.10	.04
IN.	1.15	1.14	1.45	1.18	2.17	4.78	4.85	.81	2.58	.54	.12	.04

CAL YR 1981 TOTAL 20984.50 MEAN 57.5 MAX 1500 MIN 1.1 CFSM 1.29 IN 17.50
WTR YR 1982 TOTAL 24956.15 MEAN 68.4 MAX 696 MIN .54 CFSM 1.53 IN 20.81

01350355 SCHOHARIE CREEK AT BREAKABEEN, NY

LOCATION.--Lat 42°32'10", long 74°24'40", Schoharie County, Hydrologic Unit 02020005, on left bank 100 ft (30 m) downstream from bridge on State Highway 30, 0.9 mi (1.4 km) north of Breakabeen, and 1.1 mi (1.8 km) downstream from Keyser Kill.

DRAINAGE AREA.--443 mi^2 (1,147 km^2).

PERIOD OF RECORD.--July 1975 to current year.

REVISED RECORDS.--WDR NY-79-1: Drainage area. WRD NY-81-1: 1980(M).

GAGE.--Water-stage recorder. Datum of gage is 686.79 ft (209.3 m) National Geodetic Vertical Datum of 1929. (Soil Conservation Service Benchmark.)

REMARKS.--Records fair except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi^2 (813 km^2), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--7 years, 608 ft^3/s (17.22 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,000 ft^3/s (1,359 m^3/s) revised, Mar. 21, 1980, gage height, 18.34 ft (5.590 m) from floodmarks from rating curve extended above 11,000 ft^3/s (311 m^3/s); minimum, 1.7 ft^3/s (0.05 m^3/s) Oct. 14, 1980, minimum gage height, 1.32 ft (0.403 m), Sept. 22, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,700 ft^3/s (360 m^3/s) June 6, gage height, 8.74 ft (2.664 m), minimum, 6.9 ft^3/s (0.20 m^3/s) Sept. 22, gage height, 1.32 ft (0.403 m); minimum daily 7.8 ft^3/s (0.22 m^3/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	119	81	121	130	70	2730	689	225	1040	23	12
2	39	99	165	110	320	62	1700	622	310	526	22	12
3	40	81	190	154	700	64	1730	674	196	440	23	12
4	38	79	147	322	2170	70	4100	573	176	283	21	12
5	36	74	121	793	650	78	1850	482	296	233	20	11
6	32	77	100	260	400	100	1300	468	8050	134	18	10
7	36	102	94	240	300	200	803	440	7370	106	17	10
8	48	113	88	200	270	210	1160	440	3660	73	16	9.7
9	48	135	100	140	230	80	936	343	2200	64	17	9.7
10	42	76	88	110	200	70	918	417	1410	60	17	9.7
11	37	72	78	93	180	100	899	334	936	43	17	9.7
12	34	68	74	88	200	180	854	193	837	42	15	9.4
13	36	64	70	82	140	350	729	148	737	41	14	8.7
14	34	63	80	80	130	703	1290	101	993	35	14	8.4
15	34	65	66	90	150	482	1110	64	689	32	13	7.8
16	32	77	64	110	120	337	1070	53	622	27	13	8.7
17	32	77	70	100	110	381	1570	45	1100	24	13	8.7
18	32	72	65	94	140	370	7100	41	811	22	12	8.4
19	32	69	68	100	96	496	3250	40	644	20	12	8.1
20	34	79	60	110	90	342	2300	41	482	21	11	8.1
21	34	146	58	76	86	455	2030	40	458	25	11	8.4
22	34	157	62	62	100	561	1770	36	182	21	11	8.4
23	34	123	130	58	80	455	1270	80	253	18	10	9.4
24	57	88	325	62	76	449	1100	203	265	17	11	10
25	51	85	142	72	72	554	1020	126	186	16	12	10
26	49	79	166	76	70	2230	1010	99	108	14	14	9.4
27	110	82	171	80	68	2210	1590	66	83	14	13	10
28	559	98	144	64	66	676	1220	69	182	73	12	11
29	223	128	112	58	---	667	1000	67	1030	88	11	10
30	143	107	111	52	---	517	872	82	3150	39	10	10
31	128	---	106	50	---	1340	---	96	---	27	11	---
TOTAL	2149	2754	3396	4107	7344	14859	50281	7192	37641	3618	454	290.7
MEAN	69.3	91.8	110	132	262	479	1676	232	1255	117	14.6	9.69
MAX	559	157	325	793	2170	2230	7100	689	8050	1040	23	12
MIN	31	63	58	50	66	62	729	36	83	14	10	7.8

CAL YR 1981 TOTAL 75826.8 MEAN 208 MAX 8700 MIN 8.8
WTR YR 1982 TOTAL 134085.7 MEAN 367 MAX 8050 MIN 7.8

01351500 SCHOHARIE CREEK AT BURTONSVILLE, NY

LOCATION.--Lat 42°48'00", long 74°15'48", Schenectady County, Hydrologic Unit 02020005, on right bank 0.4 mi (0.6 km) south of Burtonsville, 2.7 mi (4.3 km) north of Esperance, and 13.5 mi (21.7 km) upstream from mouth.

DRAINAGE AREA.--883 mi² (2,287 km²).

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder. Datum of gage is 507.98 ft (154.832 m) National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Records good except those for winter periods, which are poor. Regulation of flow by Blenheim-Gilboa Pumped Storage Project. Entire flow, runoff from 314 mi² (813 km²), except for periods of spill, diverted from Schoharie Reservoir through Shandaken Tunnel into Esopus Creek upstream from Ashokan Reservoir for water supply of City of New York. For periods of spill see station 01350101.

AVERAGE DISCHARGE.--43 years, 1,002 ft³/s (28.37 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 76,500 ft³/s (2,170 m³/s) Oct. 16, 1955, gage height, 12.39 ft (3.776 m); minimum, 2.4 ft³/s (0.068 m³/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of March 1936 and September 1938 reached stages of 10.5 (3.20 m) and 10.2 ft (3.11 m), respectively, from information furnished by local resident. However, flood of October 1903 is known to have reached a higher stage than the 1936 or 1938 flood.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,700 ft³/s (445 m³/s) June 6, gage height, 5.28 ft (1.609 m), maximum gage height, 6.86 ft (2.091 m) Feb. 4 (ice jam), minimum discharge, 16 ft³/s (0.45 m³/s) Sept. 14, 15, gage height, 0.56 ft (0.171 m).

REVISIONS.--The average discharge for water year 1981 has been revised to 1,004 ft³/s (28.43 m³/s), superceding figures published in the report for 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	671	305	380	500	270	8130	1090	478	2050	94	24
2	144	559	541	390	700	270	4840	958	828	1170	83	25
3	233	456	851	410	1500	260	3760	883	833	763	75	28
4	199	374	673	500	4000	260	8350	813	512	626	75	29
5	160	333	537	3500	1700	250	4450	758	575	445	74	27
6	142	362	466	1800	1000	270	3100	662	9530	361	66	25
7	210	546	350	960	840	300	2140	586	12400	276	59	23
8	237	493	330	700	780	400	2180	583	6550	245	54	22
9	208	467	400	580	900	360	2180	546	3990	204	52	21
10	175	418	370	540	850	250	2050	492	2750	179	60	20
11	148	329	350	500	740	270	2270	574	1860	159	59	19
12	132	307	330	470	660	2010	2120	364	1560	149	54	18
13	121	279	330	440	600	3860	2020	292	1310	142	48	17
14	111	260	320	430	520	5240	2830	263	1790	126	44	17
15	104	257	320	520	450	3780	2770	211	1550	116	39	18
16	99	280	360	580	500	2770	2490	172	1140	115	36	19
17	93	298	350	530	600	2120	3000	154	2230	103	35	22
18	91	305	380	560	560	1920	7990	139	2410	96	36	25
19	91	309	420	470	500	2640	6260	128	1370	88	33	33
20	96	311	400	430	440	2380	3990	136	1070	104	31	34
21	90	544	370	390	410	2940	3270	148	896	107	29	36
22	85	562	450	370	380	3420	2840	142	706	95	28	36
23	87	487	1000	350	360	3390	2350	143	610	83	28	38
24	126	411	2000	340	330	3230	1920	488	610	72	27	33
25	160	350	1100	370	320	3980	1720	659	500	65	29	30
26	160	316	800	410	300	6550	1510	384	370	58	30	28
27	582	331	680	440	290	5450	1900	289	306	53	28	29
28	5200	414	560	390	280	2790	1980	233	299	66	28	34
29	2590	378	490	350	---	2110	1580	252	795	244	26	37
30	1240	363	450	330	---	2170	1320	328	4450	185	24	35
31	842	---	400	340	---	3760	---	283	---	121	24	---
TOTAL	14083	11770	16683	18770	21010	69670	97310	13153	64278	8666	1408	802
MEAN	454	392	538	605	750	2247	3244	424	2143	280	45.4	26.7
MAX	5200	671	2000	3500	4000	6550	8350	1090	12400	2050	94	38
MIN	85	257	305	330	280	250	1320	128	299	53	24	17

CAL YR 1981 TOTAL 198663 MEAN 544 MAX 12000 MIN 22
WTR YR 1982 TOTAL 337603 MEAN 925 MAX 12400 MIN 17

01357500 MOHAWK RIVER AT COHOES, NY

LOCATION.--Lat 42°47'07", long 73°42'29", Albany County, Hydrologic Unit 02020004, on right bank at Niagara Mohawk Power Corp. School Street powerplant in Cohoes, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--3,456 mi^2 (8,951 km^2).

PERIOD OF RECORD.--December 1917 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to July 17, 1925, published as "at Crescent Dam".

REVISED RECORDS.--WSP 741: Drainage area. WSP 1302: 1919-23 (M).

GAGE.--Water-stage recorder. Datum of gage is 49.13 ft (14.975 m) National Geodetic Vertical Datum of 1929. Dec. 1, 1917, to July 16, 1925, water-stage recorder at site 1.7 mi (2.74 km) upstream at Crescent Dam at datum 130.87 ft (39.889 m) higher. July 17 to Oct. 19, 1925, powerplant gage at present site.

REMARKS.--Records fair. Total flow of Mohawk River equals flow published at Cohoes which includes small diversion for Cohoes water supply plus flow diverted at Cresent Dam to Barge Canal through Lock 6. Prior to 1925 records published as total flow. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

COOPERATION.--Diversions through Barge Canal at Lock 6 furnished by New York State Department of Transportation.

AVERAGE DISCHARGE.--7 years (1919-25), 5,820 ft^3/s (164.8 m^3/s), includes diversion at Lock 6; 57 years (1926-82), 5,707 ft^3/s (161.6 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 143,000 ft^3/s (4,050 m^3/s) Mar. 6, 1964, result of release from ice jam, gage height, 23.15 ft (7.056 m), from rating curve extended above 100,000 ft^3/s (2,830 m^3/s); minimum, 6 ft^3/s (0.17 m^3/s) Sept. 18, 1941, gage height, 3.40 ft (1.036 m); minimum daily, 23 ft^3/s (0.65 m^3/s) Aug. 24, 1941.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 41,000 ft^3/s (1,160 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	2045	*53,000	1,500	*18.08	5.511	Apr. 1	1245	51,700	1,460	17.98	5.480

Minimum discharge, 164 ft^3/s (4.64 m^3/s) Sept. 7, gage height, 4.90 ft (1.494 m); minimum daily, 196 ft^3/s (5.55 m^3/s) Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3650	10700	3730	4110	3590	2620	45400	7940	3330	12200	1710	196
2	3410	7460	4500	4200	3640	2500	37000	8110	8190	5940	1390	609
3	3600	3700	8410	3780	4150	2630	26400	6760	8690	3960	1420	1180
4	3530	5460	10600	3500	7220	2230	34000	5680	5470	4090	1410	1440
5	3510	4560	8110	11200	13800	2540	26000	5840	4290	3980	1450	960
6	3480	4730	5350	12400	11700	2670	19400	4580	19500	2390	1390	1290
7	8050	8230	5260	9990	9570	3090	15400	4880	27100	1950	1370	881
8	9150	6240	7950	7260	7360	2580	12700	4820	15300	2330	756	911
9	7940	6520	5340	5880	6270	2590	11400	4780	9250	2390	1370	770
10	6310	5390	4370	5170	5670	2850	10400	5400	6970	2360	1200	791
11	4220	4800	3670	3230	4950	2900	11600	4940	5350	2310	1690	782
12	3540	4750	3720	1900	4260	3230	10400	2730	4380	1880	1790	806
13	3900	4430	3710	2910	4020	5510	9350	2890	4410	1460	1540	1080
14	3160	4340	2880	3770	3830	10700	12000	3260	4340	1460	1480	1180
15	3070	4280	2810	3510	3410	13500	14800	3120	4760	1530	986	1100
16	3530	4170	3680	4010	3560	13400	12900	2550	4660	1980	1340	1070
17	2540	3960	3370	3940	3630	11800	16900	3060	10200	1490	1100	1130
18	2200	3950	3230	3150	4150	9920	30800	2540	8430	1510	640	1160
19	2810	3920	3610	2980	4590	10800	31100	2990	5630	1470	809	989
20	4260	4070	2340	3170	4000	12400	18700	3080	4810	1570	799	1090
21	3160	7460	2070	3170	3590	14800	17200	3110	3240	2080	914	997
22	3120	8180	3010	3650	3620	17500	18500	3640	3070	1550	1050	1020
23	3450	6480	3070	3660	3550	20700	14100	3600	3760	1510	864	1040
24	3620	5390	5570	3090	3500	19300	12600	4360	3740	1420	823	1070
25	3860	4940	8100	2610	3570	20800	12300	6060	3740	1370	877	1590
26	4470	3470	6880	2710	3390	29600	10700	4700	3670	1190	819	1580
27	14400	4340	5650	3350	2860	27700	14700	3960	1860	1260	915	1330
28	40500	5460	5040	3580	2820	17500	16500	3650	2520	1250	1240	1290
29	39900	6400	5170	3600	---	13400	13300	3760	4280	1400	1430	1270
30	24800	4860	4920	3560	---	12300	9880	3590	19600	1390	810	1310
31	15300	---	4440	3630	---	17200	---	3380	---	1690	410	---
TOTAL	242440	162640	150560	136670	140270	331260	546430	133760	214540	74360	35792	31912
MEAN	7821	5421	4857	4409	5010	10690	18210	4315	7151	2399	1155	1064
MAX	40500	10700	10600	12400	13800	29600	45400	8110	27100	12200	1790	1590
MIN	2200	3470	2070	1900	2820	2230	9350	2540	1860	1190	410	196

CAL YR 1981 TOTAL 1687440 MEAN 4623 MAX 45700 MIN 546
WTR YR 1982 TOTAL 2200634 MEAN 6029 MAX 45400 MIN 196

01357500 MOHAWK RIVER AT COHOES, NY--Continued

(01357499) Diversion, in cubic feet per second, from Mohawk River at Cresent Dam, NY, through Barge Canal at lock 6, water year October 1981 to September 1982

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	98	72	3.0	3.0	3.0	3.0	108	144	192	114	156
2	128	110	78	3.0	3.0	3.0	3.0	126	150	168	138	120
3	134	122	72	3.0	3.0	3.0	3.0	126	126	150	102	162
4	128	122	72	3.0	3.0	3.0	3.0	144	138	150	126	174
5	116	110	72	3.0	3.0	3.0	3.0	144	132	150	90	156
6	98	104	78	3.0	3.0	3.0	3.0	102	114	162	96	150
7	152	92	78	3.0	3.0	3.0	3.0	132	132	138	150	150
8	122	116	78	3.0	3.0	3.0	3.0	150	144	150	120	144
9	110	122	72	3.0	3.0	3.0	3.0	132	132	150	108	144
10	122	98	84	3.0	3.0	3.0	3.0	126	144	162	114	132
11	128	110	72	3.0	3.0	3.0	3.0	126	138	156	96	138
12	164	98	72	3.0	3.0	3.0	3.0	132	156	144	102	144
13	128	98	72	3.0	3.0	3.0	88	126	120	156	114	138
14	128	98	72	3.0	3.0	3.0	88	132	138	150	180	150
15	140	110	72	3.0	3.0	3.0	88	120	114	138	132	138
16	134	110	3.0	3.0	3.0	3.0	120	156	150	162	126	138
17	116	104	3.0	3.0	3.0	3.0	102	126	138	150	132	114
18	146	104	3.0	3.0	3.0	3.0	102	138	156	150	102	132
19	134	110	3.0	3.0	3.0	3.0	114	150	150	126	114	150
20	134	92	3.0	3.0	3.0	3.0	102	138	126	150	132	138
21	140	98	3.0	3.0	3.0	3.0	102	138	144	132	126	156
22	134	104	3.0	3.0	3.0	3.0	108	162	138	150	156	138
23	104	110	3.0	3.0	3.0	3.0	102	126	144	150	108	144
24	122	110	3.0	3.0	3.0	3.0	102	132	156	144	114	144
25	104	92	3.0	3.0	3.0	3.0	102	120	132	150	120	114
26	122	92	3.0	3.0	3.0	3.0	108	162	168	138	120	144
27	116	104	3.0	3.0	3.0	3.0	108	162	156	168	114	150
28	98	104	3.0	3.0	3.0	3.0	108	126	138	144	102	144
29	98	98	3.0	3.0	---	3.0	102	162	156	144	132	126
30	98	92	3.0	3.0	---	3.0	126	162	120	168	102	114
31	98	---	3.0	3.0	---	3.0	---	168	---	144	84	---
TOTAL	3836	3132	1164.0	93.0	84.0	93.0	1908.0	4254	4194	4686	3666	4242
MEAN	124	104	37.5	3.00	3.00	3.00	63.6	137	140	151	118	141
MAX	164	122	84	3.0	3.0	3.0	126	168	168	192	180	174
MIN	98	92	3.0	3.0	3.0	3.0	3.0	102	114	126	84	114

CAL YR 1981 TOTAL 29957.0 MEAN 82.1 MAX 164 MIN 3.0
WTR YR 1982 TOTAL 31352.0 MEAN 85.9 MAX 192 MIN 3.0

01357500 MOHAWK RIVER AT COHOES, NY

REGULATION
(see Reservoirs in Hudson River Basin)

Delta Dam.
Hinckley Reservoir.
Schoharie Reservoir.

DIVERSIONS
(see Reservoirs in Hudson River Basin)

From Chenango River basin through Oriskany Creek Feeder.

From (and occasionally into) Oswego River basin through summit level of Erie (Barge) Canal between New London and Utica.

From Black River basin through Black River Canal during navigation period.

Into Esopus Creek from Schoharie Reservoir through Shandaken Tunnel for New York City water supply.

01358000 HUDSON RIVER AT GREEN ISLAND, NY

REGULATION

Great Sacandaga Lake at Conklingville (see station 01323500).
Indian Lake near Indian Lake (see station 01314500).
Mohawk River regulation listed under Mohawk River at Cohoes.

DIVERSIONS

Mohawk River diversions listed under Mohawk River at Cohoes.

Into St. Lawrence River basin through:
Glens Falls feeder at Dunham Basin (see station 01327500).
Bond Creek at Dunham Basin (see station 01328000).
Champlain (Barge) Canal (see station 01327500).

From St. Lawrence River basin through summit level of Champlain (Barge) Canal at Dunham Basin

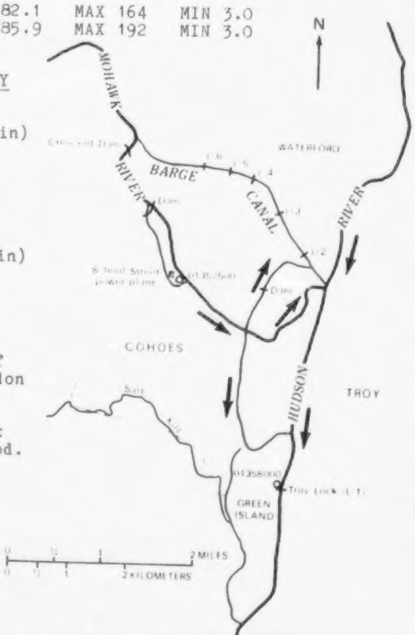


Figure 7.--Gaging stations and diversions near mouth of Mohawk River.

01358000 HUDSON RIVER AT GREEN ISLAND, NY

(National stream-quality accounting network station)
(National pesticide network station)
(National radiochemical network station)

LOCATION.--Lat 42°45'08", long 73°41'22", Albany County, Hydrologic Unit 02020003, on right bank at Green Island, just upstream from Troy lock and dam, and 0.5 mi (0.8 km) downstream from 5th branch Mohawk River. Water-quality sampling site at bridge on State Highway 7, 1.7 mi (2.7 km) downstream from discharge station.

DRAINAGE AREA.--8,090 mi² (20,953 km²), approximately (including that above site of former auxiliary gage).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.31 ft (0.094 m) below National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). From July 1, 1946 to Mar. 12, 1962 auxiliary water-stage recorder on bypass channel at datum 10.59 ft (3.228 m) higher.

REMARKS.--Records fair above 15,000 ft³/s (424.8 m³/s), and poor below. Records include flow over spillway, estimates of flow through lock, and flow through powerplant. Powerplant, located on right bank just downstream from gage, was inoperative from Nov. 20, 1960 to Feb. 23, 1971. See Diversions in Hudson River Basin for regulation and diversions upstream from this station.

AVERAGE DISCHARGE.--36 years, 13,715 ft³/s (388.4 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181,000 ft³/s (5,130 m³/s) Dec. 31, 1948, gage height, 27.05 ft (8.245 m), from high-water mark in gage well; maximum daily, 152,000 ft³/s (4,305 m³/s) Mar. 14, 1977; minimum daily, 882 ft³/s (25.0 m³/s) Sept. 2, 1968; minimum gage height 13.68 ft (4.170 m) July 6, 1981, when pool was lowered for inspection of flashboards.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 19, 1936, reached a stage of 29.48 ft (8.986 m) at gage on opposite bank, from information by Corps of Engineers (discharge, 215,000 ft³/s or 6,090 m³/s). Flood of Mar. 28, 1913, prior to construction of Sacandaga Reservoir and Troy lock and dam, reached a stage about 0.2 ft (0.06 m) higher upstream from former dam near same site. Downstream from dams, flood in 1913 was about 3.3 ft (1.01 m) higher than flood in 1936, from information by Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82,100 ft³/s (2,325 m³/s) Apr. 19, gage height, 21.58 ft (6.578 m); minimum daily, 2,590 ft³/s (73.3 m³/s) Aug. 23; minimum gage height, 14.07 ft (4.290 m) Aug. 23, when pool was lowered for inspection of flashboards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10300	23300	10100	9390	9880	8180	66000	26200	8270	23500	4490	4310
2	10000	18600	12300	9130	10100	8380	61300	24500	13000	15700	3420	4180
3	9980	15200	16800	8390	9960	8690	48600	22400	16400	12500	4690	4330
4	9150	16700	19600	8860	18200	9620	59500	19500	13700	10700	4600	4850
5	9040	15700	16400	23800	27100	8050	47900	17900	13300	7700	4670	3800
6	9030	15000	12900	24600	23600	8920	37400	15000	31400	6840	4280	2930
7	13700	20000	11800	21700	19700	8640	29300	14400	41700	6670	4100	3950
8	16500	17200	15500	20100	16500	8220	26000	13600	30300	7110	3360	3880
9	15900	15200	12500	15700	15000	8660	24100	12700	22900	6880	3500	4200
10	13500	14800	12800	12500	14500	9160	22500	12300	17600	6510	6050	4020
11	11200	13500	9460	13400	13400	9470	23400	13500	15700	6050	6820	3700
12	8500	12000	9250	8450	12000	10900	20400	10300	13900	3690	6330	3570
13	9300	11500	8900	9180	11700	15600	20000	9700	12200	5550	5430	2890
14	9040	11500	7950	9490	11000	23400	22800	10000	12500	5300	4920	4270
15	8370	11200	9120	9690	9820	26000	25800	9570	12500	4740	4350	4440
16	8910	8390	10900	10500	10700	25700	24200	7670	10600	5140	3270	5540
17	6820	9810	9740	10200	11000	23300	30400	6640	16100	4510	4110	5510
18	6480	10600	9330	8220	11700	20900	59400	7120	17000	4470	4030	4500
19	7030	11000	9160	10200	11400	22300	72400	7860	12200	3600	4060	3730
20	10400	11400	7160	9410	11100	25000	51800	7990	10500	4810	4120	2830
21	8960	15800	6270	9990	10200	27900	46300	10000	7200	5300	4810	4230
22	7720	16900	7880	9850	9650	31000	48200	10400	8810	4470	3800	4490
23	8960	14200	9380	9390	10100	36200	38400	9950	9970	4270	2590	4300
24	11700	14700	14200	8570	10300	34400	32100	10100	11300	3930	4480	4020
25	11800	14000	16500	7650	9920	36600	31000	14800	10600	3660	4300	5350
26	11800	11200	13800	8260	10100	50600	30800	12600	10400	2850	4250	4780
27	24000	11400	10400	8760	9250	51200	39900	10800	7590	3660	4310	5250
28	58600	13200	9340	8880	8990	35300	42600	11000	6780	3990	4880	4280
29	68700	13800	10500	8650	---	27200	36600	10600	9810	4750	4720	5580
30	50400	10800	10500	9060	---	26600	30000	9620	32900	4890	2950	5600
31	33900	---	11400	9280	---	32400	---	9060	---	5310	4600	---
TOTAL	499690	418600	351840	351250	356870	678490	1149100	387780	457130	199050	136290	129310
MEAN	16120	13950	11350	11330	12750	21890	38300	12510	15240	6421	4396	4310
MAX	68700	23300	19600	24600	27100	51200	72400	26200	41700	23500	6820	5600
MIN	6480	8390	6270	7650	8990	8050	20000	6640	6780	2850	2590	2830

CAL YR 1981 TOTAL 4148370 MEAN 11370 MAX 84800 MIN 2660
WTR YR 1982 TOTAL 5115400 MEAN 14010 MAX 72400 MIN 2590

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955 to current year.
CHEMICAL DATA: 1963 (a), 1964-65 (e), 1966-77 (d), 1978 (c), 1979-82 (d).
MINOR ELEMENTS DATA: 1970-71 (a), 1972-73, 1975-79 (b), 1980-82 (b).
RADIOCHEMICAL DATA: 1968-71 (c), 1973-75 (a), 1976 (d), 1977 (a), 1978 (b), 1979-80 (a), 1981 (b), 1982 (a).
PESTICIDE DATA: 1976-77 (b), 1978 (a), 1979 (c), 1980, 82 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c), 1976-77 (b), 1978 (a), 1979 (c), 1980-81 (d).
PCB--1978 (a), 1979 (b), 1980 (a).
NUTRIENT DATA: 1968 (b), 1969-76 (d), 1977-79 (c), 1980-82 (d).
BIOLOGICAL DATA:
Bacteria--1971 (a), 1973-74 (d), 1975 (a), 1976-78 (c), 1979-81 (d).
Phytoplankton--1975 (a), 1976-77 (c), 1978 (b), 1979-81 (c).
Periphyton--1976-77 (b), 1978 (a), 1979-80 (b).
SEDIMENT DATA: 1975 (b), 1976 (d), 1977 (b), 1978 (c), 1979-82 (d).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1965, once-daily measurements, unpublished.
pH: October 1964 to September 1965, once-daily measurements, unpublished.
WATER TEMPERATURES: April 1947 to September 1954, once-daily measurements, unpublished; October 1954 to September 1981.

REMARKS.--Prior to October 1968 sampling site at old bridge on State Highway 7 about 100 ft (33 m) upstream, and between April 1971 and September 1973 sampling site at former bridge on road between Green Island and Troy at Starbuck Island.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DIS-CHARGE, IN CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT												
19...	1100	7030	186	7.1	10.0	3.6	759	--	--	1200	250	71
DEC												
08...	1300	15500	240	7.4	--	5.0	--	--	--	640	180	89
MAR												
30...	1100	26600	189	7.3	3.0	7.5	774	13.8	100	350	180	72
MAY												
11...	1100	13500	150	6.5	13.5	6.0	768	10.8	103	K320	140	55
JUL												
20...	1200	4810	190	7.5	20.0	--	762	7.3	80	1000	K100	75
AUG												
24...	1130	4480	219	7.9	22.5	1.6	741	7.0	85	1200	90	78

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
19...	26	22	3.8	8.0	.9	45	19	10	.1	5.2	108	96
DEC												
08...	20	27	5.2	8.8	.9	69	21	10	<.1	4.2	136	119
MAR												
30...	16	22	4.2	6.0	1.1	56	16	9.3	<.1	5.1	107	98
MAY												
11...	14	17	3.0	5.8	.6	41	13	8.1	<.1	4.1	91	76
JUL												
20...	17	23	4.3	7.1	.7	58	15	11	.1	2.8	129	99
AUG												
24...	27	24	4.5	13	.8	51	22	17	<.1	3.5	116	116

K Results based on colony count outside the acceptable range (non-ideal colony count).

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT 19...	.60	.080	.38	.040	.020	.040	1	1	100	20	5	6
DEC 08...	.66	.200	.41	.040	.020	.060	--	--	--	--	--	--
MAR 30...	.72	.090	.48	.050	.020	.010	3	1	<100	20	2	4
MAY 11...	1.9	.180	.58	.050	.020	.020	--	--	--	--	--	--
JUL 20...	.42	.090	.40	.090	.070	.030	1	1	100	28	12	15
AUG 24...	.43	.050	.70	.040	.020	.020	1	<1	100	28	18	15

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
OCT 19...	20	10	1	<1	12	12	390	45	9	2	50
DEC 08...	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	20	10	<1	<1	13	5	610	48	24	4	50
MAY 11...	--	--	--	--	--	--	--	--	--	--	--
JUL 20...	10	10	1	<1	15	15	300	50	10	4	50
AUG 24...	<10	<10	4	1	19	15	200	37	9	3	40

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 19...	15	.1	.1	5	2	<1	<1	<2	<1	50	7
DEC 08...	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	25	.2	.2	3	<1	<1	<1	<1	<1	40	24
MAY 11...	--	--	--	--	--	--	--	--	--	--	--
JUL 20...	11	.1	<.1	3	2	<1	<1	<1	<1	50	12
AUG 24...	15	<.1	<.1	3	2	<1	<1	<1	<1	90	12

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
MAR 30...	1100	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.01	<.01
MAY 11...	1100	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.01	<.01

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
MAR 30...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
MAY 11...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAR 30...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01
MAY 11...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)
DEC 08...	1302	<1.7	1.1	.05	.15	<3.6	<.4	<1.6	1.1
JUL 20...	1201	2.4	<.8	.06	.23	<1.8	<.7	2.3	<.8

01358000 HUDSON RIVER AT GREEN ISLAND, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET)	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)
OCT						
19...	1030	637	5.00	1.00	200	10.5
19...	1035	637	--	3.00	202	10.0
19...	1040	637	--	4.00	200	10.0
19...	1045	574	12.0	2.00	190	--
19...	1050	574	--	7.00	191	--
19...	1055	574	--	10.0	180	--
19...	1115	480	20.5	4.00	193	10.0
19...	1120	480	--	12.0	191	10.0
19...	1125	480	--	16.0	183	10.0
19...	1130	429	22.0	4.00	184	10.0
19...	1135	429	--	13.0	191	10.0
19...	1140	429	--	18.0	181	10.0
19...	1145	367	27.0	5.00	175	10.0
19...	1150	367	--	16.0	191	10.0
19...	1155	367	--	22.0	182	10.0
19...	1200	304	24.5	5.00	175	10.0
19...	1205	304	--	15.0	171	10.0
19...	1210	304	--	20.0	167	10.0
19...	1215	241	24.5	5.00	156	10.0
19...	1220	241	--	15.0	168	10.0
19...	1225	241	--	20.0	166	10.0
19...	1230	159	22.0	4.00	150	10.0
19...	1235	159	--	13.0	158	10.0
19...	1240	159	--	18.0	163	10.0
19...	1245	97	21.0	4.00	150	10.0
19...	1250	97	--	13.0	147	10.0
19...	1255	97	--	17.0	150	10.0
19...	1300	35	21.5	4.00	142	10.0
19...	1305	35	--	13.0	141	10.0
19...	1310	35	--	17.0	140	10.0
DEC						
08...	1145	429	25.0	--	268	--
08...	1155	637	7.50	--	285	--
08...	1205	574	15.0	--	280	--
08...	1215	480	24.5	--	272	--
08...	1225	367	28.0	--	254	--
08...	1235	304	27.5	--	243	--
08...	1240	241	26.5	--	226	--
08...	1250	159	25.5	--	200	--
08...	1301	97	25.0	--	199	--
08...	1305	35	24.5	--	173	--
08...	1305	35	24.5	--	173	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
19...	1100	7030	5	95	--
DEC					
08...	1300	15500	8	335	--
MAR					
30...	1100	26600	17	1220	--
MAY					
11...	1100	13500	19	693	--
JUL					
20...	1200	4810	25	325	93
AUG					
24...	1130	4480	3	36	--

01359139 HUDSON RIVER AT ALBANY, NY

LOCATION.--Lat 42°38'57", long 73°44'46", Albany County, Hydrologic Unit 02020006, on right bank 0.5 mi (0.8 km) upstream from bridge on U.S. Highways 9 and 20 in Albany, and 0.5 mi (0.8 km) downstream from the Penn Central Transportation Company bridge.

DRAINAGE AREA.--8,290 mi^2 (21,466 km^2).

PERIOD OF RECORD.--October 1972 to September 1976, April 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft (3.048 m) below National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Gage-height record converted to elevation above or below (-) mean sea level for publication.

TIDE ELEVATIONS, IN FEET, APRIL 1981 TO SEPTEMBER 1981

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum high tide												
Elevation							4.94	5.26	5.12	4.98	4.93	5.33
Date							5	16	4	21	16	9
Minimum low tide												
Elevation							-3.99	-2.45	-2.66	-2.52	-2.25	-2.12
Date							15	7	28	27	18	30
Mean high tide							4.02	4.48	4.38	4.32	4.34	4.45
Mean water level							1.19	1.56	1.32	1.25	1.37	1.68
Mean low tide							-1.65	-1.31	-1.78	-1.89	-1.71	-1.26

TIDE ELEVATIONS, IN FEET, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Maximum high tide												
Elevation	6.40	5.54	5.20	6.29	4.98	6.86	7.18	5.29	6.42	5.02	5.13	4.69
Date	29	16	27	4	6	26	4	25	7	1	5	3
Minimum low tide												
Elevation	-2.22	-2.62	-4.13	-2.36	-1.92	-1.46	-2.71	-2.63	-1.89	-2.34	-2.71	-2.70
Date	20	30	7	2	2	8	7	10	20	21	21	7
Mean high tide	4.35	4.32	4.01	3.30	3.62	4.43	5.07	4.47	5.04	4.40	4.26	4.15
Mean water level	1.77	1.57	1.19	1.33	1.81	2.13	2.80	1.63	2.33	1.38	1.28	1.28
Mean low tide	-1.04	-1.43	-1.86	-0.79	-0.02	-0.23	0.38	-1.42	-0.76	-1.77	-1.81	-1.73

01359528 NORMANS KILL AT ALBANY, NY

LOCATION.--Lat 42°38'00", long 73°48'22", Albany County, Hydrologic Unit 02020006, on left bank, 0.35 mi (0.56 km) upstream from bridge on Normans Kill Road at Normansville, and 0.40 mi (0.64 km) upstream from Delaware Avenue bridge in Albany.

DRAINAGE AREA.--168 mi^2 (435 km^2).

PERIOD OF RECORD.--May 1979 to current year. Occasional low-flow measurements, water years 1949, 1954, 1959, 1962-65.

GAGE.--Water-stage recorder. Altitude of gage is 90 ft (27.4 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are poor. Diversion above station for municipal supply by city of Watervliet and town of Guilderland. Seasonal diversions for two golf courses.

COOPERATION.--Figures of diversions from Watervliet Reservoir for municipal supply furnished by city of Watervliet and town of Guilderland.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 11,600 ft^3/s (329 m^3/s) Mar. 22, 1980, gage height 13.41 ft (4.087 m); minimum 11 ft^3/s (0.31 m^3/s) Sept. 29, Oct. 9, 1980, Sept. 30, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,200 ft^3/s (62.3 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)	Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Mar. 26	2100	2,310	65.4	6.92	2.109	June 6	2100	*2,780	78.7	*7.39	2.252

Minimum discharge, 12 ft^3/s (0.34 m^3/s) Sept. 15; minimum gage height 2.97 ft (0.905 m) Aug. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	137	60	100	43	80	1370	95	100	205	38	17
2	41	112	107	110	56	80	891	91	107	184	54	19
3	39	93	175	120	80	80	550	86	98	189	67	22
4	29	77	150	234	170	80	983	105	91	223	29	16
5	28	69	119	897	600	80	529	98	198	100	25	15
6	29	82	105	587	270	80	347	124	1650	105	23	16
7	36	114	60	410	220	80	249	110	2220	43	20	15
8	31	107	50	160	170	80	264	95	1090	41	20	15
9	29	86	49	130	160	80	226	93	846	41	45	15
10	29	75	47	110	140	80	292	100	488	39	51	16
11	29	67	46	94	130	100	453	82	161	39	33	13
12	29	60	46	84	120	400	493	102	205	41	34	13
13	29	54	46	76	110	600	439	86	241	47	33	15
14	31	49	46	70	100	1100	443	71	280	38	31	15
15	33	53	47	66	100	900	429	69	219	38	22	15
16	33	54	49	62	98	680	378	62	195	39	20	19
17	33	56	50	58	96	540	387	62	167	45	22	19
18	34	65	54	56	92	493	871	62	84	49	23	16
19	39	75	60	54	90	637	571	60	280	43	22	16
20	36	82	68	52	90	759	360	73	473	39	20	15
21	36	135	62	50	88	1050	280	67	98	38	22	17
22	36	143	93	48	88	1040	219	53	54	34	20	20
23	47	110	130	47	86	1270	181	79	100	33	20	47
24	73	95	317	45	84	1080	156	117	65	33	20	28
25	36	84	360	44	84	1240	137	105	91	33	29	16
26	47	73	200	43	82	2030	130	95	53	33	29	13
27	65	69	150	41	82	1370	143	86	49	25	22	22
28	304	82	120	40	80	582	130	79	60	95	20	22
29	582	86	100	40	---	401	112	107	130	54	19	16
30	268	69	96	40	---	387	102	95	338	29	17	15
31	184	---	94	40	---	654	---	98	---	31	16	---
TOTAL	2318	2513	3156	4008	3609	18113	12115	2707	10231	2026	866	538
MEAN	74.8	83.8	102	129	129	584	404	87.3	341	65.4	27.9	17.9
MAX	582	143	360	897	600	2030	1370	124	2220	223	67	47
MIN	23	49	46	40	43	80	102	53	49	25	16	13
‡	7.23	7.29	7.09	7.36	7.71	7.16	8.06	7.49	8.08	7.95	7.86	7.89

CAL YR 1981 TOTAL 44157 MEAN 121 MAX 3160 MIN 15 ‡ 7.55
WTR YR 1982 TOTAL 62200 MEAN 170 MAX 2220 MIN 13 ‡ 7.60

‡ Diversion, in cubic feet per second, from Watervliet Reservoir for municipal supply.

01359750 MOORDENER KILL AT CASTLETON-ON-HUDSON, NY

LOCATION.--Lat 42°32'02", long 73°44'15", Rensselaer County, Hydrologic Unit 02020006, on left bank 800 ft (244 m) downstream from bridge on State Highway 150, 0.2 mi (0.3 km) east of village of Castleton-on-Hudson, 0.5 mi (0.8 km) downstream from unnamed tributary, and 1.2 mi (1.9 km) upstream from mouth.

DRAINAGE AREA.--32.6 mi^2 (84.4 km^2).

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 98.72 ft (30.090 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1957, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for winter periods, which are poor. Slight diurnal fluctuation of low flow by mills upstream and occasional regulation at dam 800 ft (244 m) upstream.

AVERAGE DISCHARGE.--25 years, 37.7 ft^3/s (1.068 m^3/s), 15.71 in/yr (399 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft^3/s (38.2 m^3/s) Jan. 22, 1959, gage height, 3.63 ft (1.106 m), maximum gage height, 4.02 ft (1.225 m) Jan. 27, 1976 (ice jam); minimum discharge, 0.30 ft^3/s (0.008 m^3/s) Aug. 9, 10, 1964, gage height, 0.25 ft (0.076 m), minimum daily, 1.0 ft^3/s (0.028 m^3/s) Sept. 6, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft^3/s (11 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Feb. 4	0630	a600	17.0	b3.37	1.027

a Estimated.
b Ice jam.

Minimum recorded discharge, 3.8 ft^3/s (0.108 m^3/s) Sept. 12, 13, 14, 15, 19, 20, minimum gage height, 0.61 ft (0.186 m) Mar. 4, Sept. 10, 11, 12, 13, 14, minimum daily, 3.8 ft^3/s (0.108 m^3/s) Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	19	18	33	10	20	118	38	21	83	11	7.8
2	10	17	51	35	11	19	86	34	30	51	11	6.8
3	12	15	50	54	15	19	93	31	29	40	15	7.3
4	9.6	12	39	129	250	19	221	30	20	34	11	5.9
5	7.9	12	32	237	130	18	117	28	37	28	9.5	5.5
6	7.3	17	30	80	110	18	80	26	176	24	8.6	5.1
7	9.0	34	26	60	82	18	82	26	171	21	8.0	5.1
8	9.6	25	25	45	72	18	108	24	101	19	7.6	4.8
9	8.4	20	25	37	60	18	85	24	62	17	7.7	4.4
10	7.9	17	23	32	54	19	91	26	46	15	7.3	4.4
11	6.8	16	21	28	47	51	122	22	38	14	6.9	4.4
12	6.4	14	20	25	42	207	132	20	33	15	6.6	4.1
13	6.4	12	20	22	38	231	138	20	33	15	6.6	4.1
14	5.9	12	19	21	35	247	169	19	50	13	6.7	4.1
15	5.9	15	19	20	34	150	132	17	35	12	6.4	3.8
16	5.9	17	18	18	37	120	109	17	29	12	6.2	4.4
17	5.9	15	18	17	43	115	96	16	37	11	6.2	4.4
18	5.9	17	19	16	38	112	266	15	32	10	6.3	4.4
19	6.4	20	20	15	32	155	148	14	25	10	6.1	4.1
20	6.4	21	22	14	28	172	102	18	28	11	6.4	4.1
21	6.4	33	26	14	25	173	83	27	23	11	6.6	4.4
22	6.4	33	47	13	24	175	71	18	20	9.2	6.2	4.8
23	8.4	27	74	13	23	163	62	23	53	8.7	5.8	5.5
24	26	24	123	12	23	134	56	50	35	8.1	5.8	5.1
25	21	21	76	11	22	134	50	45	24	7.7	7.6	4.4
26	21	18	60	11	21	230	51	30	21	7.4	7.7	4.1
27	43	20	50	11	21	190	74	22	19	7.0	6.5	5.1
28	51	21	45	10	20	106	56	18	22	34	6.0	5.1
29	38	18	40	10	---	85	46	24	117	37	5.7	4.8
30	27	16	35	10	---	77	42	25	213	18	5.5	4.4
31	22	---	32	10	---	87	---	20	---	13	5.5	---
TOTAL	421.7	578	1123	1063	1347	3300	3086	767	1580	616.1	230.0	146.7
MEAN	13.6	19.3	36.2	34.3	48.1	106	103	24.7	52.7	19.9	7.42	4.89
MAX	51	34	123	237	250	247	266	50	213	83	15	7.8
MIN	5.9	12	18	10	10	18	42	14	19	7.0	5.5	3.8
CFSM	.42	.59	1.11	1.05	1.48	3.25	3.16	.76	1.62	.61	.23	.15
IN.	.48	.66	1.28	1.21	1.54	3.77	3.52	.88	1.80	.70	.26	.17

CAL YR 1981 TOTAL 10913.0 MEAN 29.9 MAX 450 MIN 3.1 CFSM .92 IN 12.45
WTR YR 1982 TOTAL 14258.5 MEAN 39.1 MAX 266 MIN 3.8 CFSM 1.20 IN 16.27

01362198 ESOPUS CREEK AT SHANDAKEN, NY
(Hydrologic bench-mark station)

LOCATION.--Lat 42°06'59", long 74°23'20", Ulster County, Hydrologic Unit 02020006, on left bank 2,400 ft (732 m) downstream from bridge on State Highway 28, at Shandaken, 0.5 mi (0.8 km) downstream from Bushnellsville Creek, 0.5 mi (0.8 km) upstream from Fox Hollow Creek, and 5.2 mi (8.4 km) northwest of Phoenicia. Water-quality sampling site at discharge station.

DRAINAGE AREA.--59.5 mi² (154.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,017.27 ft (310.064 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for winter months, which are poor. Occasional slight regulation when filling or draining swimming pools or small ponds above station.

AVERAGE DISCHARGE.--19 years, 138 ft³/s (3.908 m³/s), 31.50 in/yr (800 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft³/s (450 m³/s) Mar. 21, 1980, gage height, 13.00 ft (3.962 m) from floodmarks, from rating curve extended above 2,200 ft³/s (62.3 m³/s) on basis of slope-area measurement at gage height 10.88 ft (3.316 m); minimum, 2.8 ft³/s (0.079 m³/s) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 18	0315	*1,790	50.7	*7.51	2.289
June 6	2215	1,360	38.5	7.10	2.164

Minimum discharge, 6.3 ft³/s (0.178 m³/s) Sept. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	142	71	66	39	50	481	176	47	131	27	29
2	47	128	110	80	50	48	402	161	60	121	24	20
3	41	100	110	100	110	46	506	146	54	114	22	21
4	42	107	100	121	591	46	767	133	53	106	17	18
5	43	100	98	206	410	52	536	121	75	95	13	18
6	42	103	94	170	312	48	424	114	703	89	13	22
7	49	100	92	150	253	46	339	106	973	82	14	19
8	52	93	88	140	209	46	287	100	531	76	20	17
9	51	89	86	130	170	47	249	95	363	70	21	16
10	50	86	82	110	150	52	227	88	273	65	20	15
11	49	85	79	100	140	60	209	82	227	61	18	14
12	48	80	75	92	130	80	192	79	189	88	16	11
13	46	78	72	88	120	110	218	75	179	69	15	8.2
14	45	78	70	82	110	150	201	70	171	65	15	7.8
15	43	78	70	78	106	189	198	66	144	65	13	12
16	41	79	64	74	111	189	215	62	135	55	8.6	18
17	39	79	60	70	104	187	389	59	139	25	12	12
18	40	79	56	70	96	179	1110	55	121	34	11	11
19	47	75	54	68	93	181	591	57	112	39	10	9.5
20	42	83	54	62	90	176	452	53	106	45	10	7.1
21	41	88	56	60	88	184	406	50	96	38	10	8.2
22	40	85	62	56	83	192	331	48	90	32	9.5	9.0
23	46	82	68	52	80	189	266	53	96	29	9.5	15
24	76	82	66	49	78	192	230	54	85	26	8.6	11
25	78	79	62	46	68	209	218	50	78	24	10	8.6
26	90	79	60	44	62	331	233	46	72	23	11	7.1
27	139	79	58	41	58	327	294	44	78	23	14	25
28	246	78	58	39	54	276	246	41	92	43	13	20
29	215	74	58	38	---	240	212	51	133	35	12	19
30	168	72	58	36	---	221	192	48	158	29	11	18
31	158	---	60	36	---	269	---	47	---	27	11	---
TOTAL	2182	2640	2251	2554	3965	4612	10621	2430	5633	1824	439.2	446.5
MEAN	70.4	88.0	72.6	82.4	142	149	354	78.4	188	58.8	14.2	14.9
MAX	246	142	110	206	591	331	1110	176	973	131	27	29
MIN	28	72	54	36	39	46	192	41	47	23	8.6	7.1
CFSM	1.18	1.48	1.22	1.39	2.39	2.50	5.95	1.32	3.16	.99	.24	.25
IN.	1.36	1.65	1.41	1.60	2.48	2.88	6.64	1.52	3.52	1.14	.27	.28

CAL YR 1981 TOTAL 37470.8 MEAN 103 MAX 1750 MIN 9.9 CFSM 1.73 IN 23.43
WTR YR 1982 TOTAL 39597.7 MEAN 108 MAX 1110 MIN 7.1 CFSM 1.82 IN 24.76

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1963-65 (a), 1966-67 (b), 1968-82 (d).
MINOR ELEMENT DATA: 1964-65, 1967-73, 1975-76 (a), 1977 (b), 1978-82 (a).
RADIOCHEMICAL DATA: 1967-77, 1979-82 (a).
PESTICIDE DATA: 1967-72, 1974-77, 1979-82 (a).
ORGANIC DATA: OC--1979 (a), 1981 (c), 1982 (d).
PCB--1974-77, 1979-82 (a).
PCN--1977, 1979-82 (a).
NUTRIENT DATA: 1968 (a), 1969-71 (d), 1972 (c), 1974 (a), 1975-82 (d).
BIOLOGICAL DATA:
Bacteria--1968-69 (d), 1970-72 (c), 1973-82 (d).
SEDIMENT DATA: 1969-71 (c), 1972-75, 1977-82 (d).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1963 to July 1968, January 1970 to current year.

INSTRUMENTATION.--Temperature recorder since July 1963.

REMARKS.--No temperature record Oct. 1 to Nov. 4, Nov. 21 to Feb. 2, Feb. 24-27, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (except water years 1969, 1977, 1981), 28.5°C Aug. 16, 1965, Aug. 9, 1980; minimum, freezing point on many days during winter periods except water years 1967 and 1976.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.5°C July 18, minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)
OCT												
20...	1200	41	53	7.1	9.0	--	--	--	K3	K15	19	2.0
NOV												
03...	1100	114	50	6.7	7.0	743	12.2	103	K5	K6	17	9.0
DEC												
09...	1400	85	55	7.6	2.0	727	13.6	103	28	23	17	6.0
JAN												
19...	1100	75	56	7.1	.0	742	15.1	106	<1	K17	18	10
FEB												
17...	1200	105	43	6.6	2.0	740	13.3	99	K2	K16	19	11
MAR												
09...	1200	61	58	7.0	.0	745	14.7	103	K2	120	22	12
APR												
13...	1000	181	49	6.7	4.0	728	12.9	103	K3	170	17	9.0
MAY												
12...	1100	78	51	7.2	9.5	740	12.5	113	25	210	15	4.0
JUN												
22...	1230	92	49	7.4	15.0	735	10.2	105	K11	28	17	5.0
JUL												
21...	1300	39	63	7.4	20.0	738	8.9	101	K14	220	21	5.0
AUG												
25...	1100	9.9	80	7.1	15.5	728	7.1	75	--	120	26	6.0
SEP												
21...	1200	7.4	82	7.2	12.5	740	11.1	107	20	73	26	11

K Results based on colony count outside the acceptable range (non-ideal colony count).

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 20...	5.5	1.2	2.3	.3	17	7.8	3.2	<.1	2.2	47	33	.12
NOV 03...	4.8	1.2	2.0	.2	8.0	7.6	2.7	.0	2.8	30	26	.31
DEC 09...	4.9	1.1	2.3	.3	11	7.5	3.4	<.1	2.1	32	28	.33
JAN 19...	5.2	1.1	3.2	.3	8.0	8.1	4.4	<.1	3.0	34	30	.50
FEB 17...	5.3	1.3	3.4	.3	8.0	7.7	5.6	<.1	3.0	34	44	.52
MAR 09...	6.4	1.4	5.0	.3	10	9.0	8.5	<.1	2.7	48	39	.50
APR 13...	4.9	1.2	2.8	.2	8.0	7.0	4.7	<.1	2.8	30	29	.54
MAY 12...	4.4	.9	2.7	.4	11	6.0	3.1	.4	1.9	--	26	.30
JUN 22...	5.3	1.0	2.3	<.1	12	7.0	3.3	<.1	2.7	29	29	.14
JUL 21...	6.3	1.3	3.0	.3	16	7.0	4.7	.1	3.3	24	36	.22
AUG 25...	7.7	1.6	5.0	.3	20	8.0	6.0	<.1	3.2	40	44	<.10
SEP 21...	7.8	1.5	3.8	.3	15	7.0	6.9	<.1	2.5	55	39	<.10

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT 20...	.11	<.010	<.010	--	--	.16	.13	.290	.010	.4	--	--
NOV 03...	.31	.020	.010	1.2	.61	1.20	.62	.020	<.010	.3	--	--
DEC 09...	.37	.050	.070	--	.03	<.10	.10	<.010	<.010	.9	--	--
JAN 19...	.48	.030	.030	.24	.12	.27	.15	<.010	<.010	1.4	--	--
FEB 17...	.52	.040	.020	.24	.34	.28	.36	.030	.010	.6	--	--
MAR 09...	.52	.020	.030	.23	.18	.25	.21	<.010	<.010	1.1	--	--
APR 13...	.52	.030	.020	.23	.10	.26	.12	.010	.010	--	.3	.2
MAY 12...	.32	.040	.040	.09	--	.13	<.10	.010	<.010	.9	--	--
JUN 22...	.11	.030	<.010	.17	--	.20	<.10	<.010	<.010	.9	--	--
JUL 21...	.19	.040	.040	.16	.16	.20	.20	.020	.020	.9	--	--
AUG 25...	<.10	.020	.020	.08	.78	.10	.80	.010	.020	--	1.0	.1
SEP 21...	<.10	.030	.060	.37	.04	.40	.10	.010	<.010	--	--	--

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
APR 13...	1	1	<100	17	<1	<1	<1	20	2	<3	13
AUG 25...	1	1	100	20	<1	1	<1	10	<1	<3	6

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
APR 13...	<10	50	<3	14	--	<4	20	2	<.1	<.1
AUG 25...	<10	50	6	4	<10	<4	10	3	.1	<.1

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
APR 13...	<10	<1	<1	<1	<1	18	<6.0	20	3	<.01
AUG 25...	<10	<1	<1	<1	<1	25	<6.0	60	5	<.01

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
JUL 21...	1300	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
JUL 21...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUL 21...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUL 21...	1300	<1	<1.0	<.1	<1.0	<.1	.3	<.1	<.1

DATE	ENDO-SULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
JUL 21...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<1.00	<10

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
JUL 21...	1300	.7	<.4	.03	.03	<.6	<.4	.6	<.4

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 20...	1200	41	6	.66	100	APR 13...	1000	181	7	3.4	64
NOV 03...	1100	114	12	3.7	96	MAY 12...	1100	78	0	.00	--
DEC 09...	1400	85	13	3.0	100	JUN 22...	1230	92	2	.50	--
JAN 19...	1100	75	1	.20	--	JUL 21...	1300	39	11	1.2	81
FEB 17...	1200	105	2	.57	--	AUG 25...	1100	9.9	1	.03	--
MAR 09...	1200	61	2	.33	--	SEP 21...	1200	7.4	0	.00	--

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---						
2				---	---	---						
3				---	---	---						
4				---	---	---						
5				10.5	7.0	8.5						
6				10.5	8.0	9.5						
7				8.0	6.0	7.0						
8				8.5	5.5	7.0						
9				7.5	6.0	7.0						
10				7.0	5.0	6.0						
11				8.0	6.5	7.5						
12				7.0	4.5	6.0						
13				7.0	3.5	5.0						
14				8.0	5.0	6.5						
15				8.0	7.0	7.5						
16				9.5	8.0	8.5						
17				9.0	8.0	8.5						
18				8.5	7.5	8.0						
19				8.5	7.5	8.0						
20				8.5	7.5	8.0						
21				---	---	---						
22				---	---	---						
23				---	---	---						
24				---	---	---						
25				---	---	---						
26				---	---	---						
27				---	---	---						
28				---	---	---						
29				---	---	---						
30				---	---	---						
31				---	---	---						
MONTH				10.5	3.5	7.5						

HUDSON RIVER BASIN

01362198 ESOPUS CREEK AT SHANDAKEN, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	.5	.0	.0	5.5	3.0	4.0	11.5	6.0	8.5
2	---	---	---	2.0	.0	.5	6.5	2.0	4.0	12.0	7.0	9.0
3	.0	.0	.0	1.0	.0	.0	4.0	2.5	3.5	11.0	6.5	8.5
4	2.0	.0	1.0	.0	.0	.0	4.0	1.5	3.0	11.0	6.5	8.5
5	2.0	.5	1.5	1.5	.0	.0	5.0	.5	2.5	14.5	6.0	9.5
6	2.5	.0	1.5	1.0	.0	.5	2.5	.0	1.0	10.0	6.5	8.5
7	2.0	.0	.0	1.5	.0	1.0	3.0	.0	1.0	16.0	8.5	11.5
8	2.0	.0	1.0	1.0	.0	.0	5.0	.0	2.0	12.5	8.5	10.5
9	1.5	.5	1.0	.0	.0	.0	4.5	.5	2.5	10.0	9.0	9.5
10	1.5	.0	.0	.5	.0	.5	6.0	1.0	3.5	15.5	7.5	11.0
11	.5	.0	.0	4.5	.0	2.0	5.5	1.5	3.5	15.5	7.5	11.0
12	.5	.0	.0	4.0	1.5	2.5	5.5	2.0	3.5	11.0	8.0	10.0
13	1.5	.0	.5	3.5	1.0	2.0	5.0	2.5	3.5	16.0	9.5	12.5
14	1.0	.0	.5	5.5	1.5	2.5	9.0	3.0	5.0	17.0	8.5	12.5
15	3.5	.0	1.5	5.5	1.0	2.5	9.5	2.0	5.5	17.5	9.0	13.0
16	3.5	2.0	3.0	4.0	1.0	2.5	10.5	3.0	6.5	16.0	9.5	13.0
17	2.0	.5	1.5	2.5	1.5	2.0	8.0	6.0	7.0	17.0	11.0	13.5
18	2.5	.0	1.0	6.5	1.5	3.5	7.0	4.0	5.0	16.0	10.5	13.0
19	1.0	.0	.5	3.5	2.5	3.0	9.0	3.5	6.0	16.5	10.5	14.0
20	3.5	1.0	2.0	7.0	2.5	4.0	10.0	5.0	7.0	17.5	12.5	15.0
21	3.0	1.0	2.0	4.0	3.0	3.5	9.5	4.5	7.0	17.0	11.5	14.0
22	3.5	.0	2.0	6.0	2.5	3.5	7.0	3.5	5.0	12.5	10.5	11.5
23	3.5	.0	2.0	7.0	2.0	4.0	10.0	3.0	6.0	10.5	9.0	9.5
24	---	---	---	6.5	1.5	3.5	12.0	5.0	7.5	11.0	9.0	10.0
25	---	---	---	7.5	2.0	4.5	12.5	5.5	8.5	14.5	10.0	12.0
26	---	---	---	4.5	2.0	4.0	8.5	7.0	8.0	19.5	9.5	14.5
27	---	---	---	3.5	.5	2.0	11.0	7.0	8.5	17.5	11.5	14.5
28	1.0	.0	.5	4.5	.0	1.5	11.5	6.0	8.0	16.0	12.5	14.0
29	---	---	---	6.0	.5	3.0	11.5	4.5	8.0	16.0	12.5	14.0
30	---	---	---	7.5	1.5	4.0	12.5	5.5	8.5	18.5	12.5	15.0
31	---	---	---	5.5	3.5	4.5	---	---	---	15.0	13.5	14.5
MONTH	3.5	.0	1.0	7.5	.0	2.0	12.5	.0	5.0	19.5	6.0	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.0	13.0	14.5	17.0	11.0	13.5	20.5	16.0	18.0	17.0	16.0	16.5
2	19.5	13.0	15.5	16.5	10.0	13.0	21.5	15.5	18.5	21.0	16.0	18.0
3	15.5	10.5	13.0	14.0	11.0	12.5	21.5	17.0	19.0	20.0	16.5	18.0
4	16.5	12.0	14.0	17.0	11.0	13.5	21.0	16.5	19.0	16.5	14.5	15.5
5	13.5	12.0	12.5	18.5	10.5	14.0	23.0	18.0	20.0	19.5	12.0	16.0
6	12.0	10.0	11.0	19.5	12.0	15.0	23.0	17.0	20.0	20.5	13.0	16.5
7	11.0	9.5	10.0	19.0	12.5	16.0	23.5	17.0	20.0	19.5	14.5	17.0
8	12.5	9.5	10.5	20.5	14.5	17.0	21.5	17.5	19.5	16.5	14.0	15.0
9	14.0	9.0	11.0	21.0	14.0	17.0	22.5	18.0	20.0	20.0	12.5	16.0
10	14.5	9.0	11.5	20.0	13.0	16.5	23.0	18.5	20.5	20.5	13.5	17.0
11	11.5	10.0	10.5	18.0	14.0	16.5	21.5	17.0	18.5	20.5	13.5	17.0
12	13.0	9.5	11.0	20.5	15.5	17.5	21.0	14.0	17.5	20.5	14.5	17.5
13	11.0	9.5	10.0	21.0	14.0	17.0	20.0	15.0	17.5	20.5	14.5	17.5
14	12.5	9.5	10.5	19.5	14.5	16.5	20.0	13.5	16.5	21.0	15.0	17.5
15	15.0	9.0	11.5	20.5	14.5	17.0	21.5	14.0	17.5	18.5	15.5	17.0
16	14.0	11.5	12.5	22.5	15.5	18.5	22.5	15.0	18.5	20.0	16.0	17.5
17	13.5	11.5	12.5	22.5	16.0	19.0	20.0	16.0	18.0	18.0	14.0	16.0
18	17.5	11.0	14.0	24.5	17.0	20.5	22.5	15.0	18.5	14.5	12.0	13.5
19	16.5	11.5	13.5	23.5	17.5	20.0	21.0	14.5	17.5	16.5	11.0	13.5
20	16.5	11.5	13.5	19.5	17.0	18.0	18.5	16.5	17.5	13.0	10.5	12.0
21	17.5	10.5	13.5	22.5	14.0	16.5	20.0	15.0	17.0	15.5	12.0	13.5
22	16.0	10.5	13.5	23.0	14.5	18.5	18.5	11.5	15.0	16.0	13.0	14.5
23	15.5	12.0	13.5	22.0	15.5	18.5	20.5	14.0	16.5	16.0	13.0	14.0
24	17.0	10.5	13.5	23.5	14.5	19.0	22.5	16.0	18.5	16.5	12.5	14.5
25	19.0	10.5	14.5	23.0	15.0	19.0	18.0	15.5	17.0	17.0	12.0	14.5
26	16.0	12.5	14.5	24.0	17.0	20.0	21.5	14.0	17.5	16.0	11.0	13.5
27	16.0	12.5	14.0	23.5	16.5	19.0	19.5	16.0	17.5	16.0	13.5	14.5
28	19.0	13.0	15.5	19.0	16.5	17.5	19.5	14.0	17.0	16.5	12.0	14.5
29	15.0	13.5	14.0	22.5	15.5	18.5	18.5	11.5	14.5	16.0	13.5	15.0
30	17.5	12.5	14.5	20.5	14.5	17.5	19.0	12.0	15.5	17.0	13.0	15.0
31	---	---	---	21.5	15.5	18.0	18.5	14.0	16.0	---	---	---
MONTH	19.5	9.0	13.0	24.5	10.0	17.0	23.5	11.5	18.0	21.0	10.5	15.5

01362500 ESOPUS CREEK AT COLDBROOK, NY

LOCATION.--Lat 42°00'51", long 74°16'16", Ulster County, Hydrologic Unit 02020006, on left bank at downstream side of bridge on Coldbrook Road, in Coldbrook, 0.3 mi (0.5 km) downstream from Little Beaver Kill, 1.5 mi (2.4 km) upstream from Ashokan Reservoir, and 2.5 mi (4.0 km) south of Mount Tremper.

DRAINAGE AREA.--192 mi^2 (497 km^2).

PERIOD OF RECORD.--January 1914 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 621.54 ft (189.445 m) National Geodetic Vertical Datum of 1929. Prior to June 15, 1916, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Since 1924, water diverted from Schoharie Reservoir through Shandaken Tunnel (see Reservoirs in Hudson River Basin) enters Esopus Creek 10.5 mi (16.9 km) above station and is included in records of daily discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,300 ft^3/s (1,850 m^3/s) Mar. 21, 1980, gage height, 21.94 ft (6.687 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurements at gage heights 12.39 ft (3.776 m), 15.15 ft (4.618 m), and 20.70 ft (6.309 m); minimum daily, 8 ft^3/s (0.23 m^3/s) Oct. 14, 1914.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,850 ft^3/s (194 m^3/s) June 6, gage height, 9.89 ft (3.014 m); minimum daily, 172 ft^3/s (4.87 m^3/s) Oct. 25, minimum gage height, 4.20 ft (1.280 m) Oct. 25, 26, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	567	668	800	840	480	2580	681	459	1050	326	348
2	400	569	788	840	885	460	2170	614	579	875	317	309
3	368	882	781	836	1640	460	2680	556	523	779	317	305
4	359	836	755	1560	3610	450	3470	501	596	713	309	288
5	345	804	746	2050	2220	460	2360	449	1200	650	305	280
6	345	817	735	1710	1570	470	1960	409	4950	602	301	276
7	359	803	722	1570	1250	480	1480	380	4240	568	296	268
8	359	768	727	1300	1000	490	1150	348	2010	534	296	264
9	345	749	716	1200	880	500	1010	326	1310	585	301	264
10	341	730	695	1100	780	520	935	305	963	806	292	260
11	332	720	684	1100	720	533	896	326	752	792	288	256
12	328	706	672	1000	680	752	878	501	626	819	284	253
13	299	695	662	1000	660	894	905	490	596	496	280	249
14	311	686	651	940	640	1110	963	474	632	449	276	249
15	307	693	653	900	660	1130	944	459	506	449	276	249
16	303	696	654	880	715	1100	964	444	454	428	272	260
17	295	691	630	840	735	1090	1390	428	501	409	272	292
18	299	688	623	800	686	1050	3880	419	414	394	272	556
19	328	677	592	780	672	1090	1980	404	362	380	264	545
20	303	715	586	740	651	1080	1540	399	339	394	292	480
21	295	739	581	720	635	1130	1400	394	344	380	512	260
22	287	720	595	700	616	1190	1180	385	512	357	506	230
23	307	711	679	700	601	1420	963	419	550	353	464	288
24	248	707	716	680	588	1550	826	444	490	348	305	268
25	172	699	672	680	540	1650	752	419	464	339	301	253
26	241	693	653	660	520	2330	875	394	444	330	292	249
27	448	698	652	660	500	2130	1400	385	454	326	288	313
28	1210	689	646	660	490	1810	1050	376	573	362	284	284
29	939	677	639	660	---	1640	875	438	1630	353	280	264
30	763	668	680	644	---	1570	765	428	1510	330	276	256
31	649	---	740	740	---	1770	---	459	---	326	276	---
TOTAL	12188	21493	20993	29450	25984	32789	44221	13454	28983	15976	9620	8916
MEAN	393	716	677	950	928	1058	1474	434	966	515	310	297
MAX	1210	882	788	2050	3610	2330	3880	681	4950	1050	512	556
MIN	172	567	581	644	490	450	752	305	339	326	264	230

CAL YR 1981 TOTAL 297155 MEAN 814 MAX 13200 MIN 110
WTR YR 1982 TOTAL 264067 MEAN 723 MAX 4950 MIN 172

01364500 ESOPUS CREEK AT MOUNT MARION, NY

LOCATION.--Lat 42°02'16", long 73°58'21", Ulster County, Hydrologic Unit 0200006, on left bank at downstream side of bridge on Glasco Turnpike, 0.8 mi (1.3 km) east of Mount Marion, 1.6 mi (2.6 km) downstream from Plattekill Creek, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--419 mi^2 (1,085 km^2).

PERIOD OF RECORD.--March 1970 to current year. Monthly discharge only May 1907 to March 1918, published in WSP 1302. Occasional miscellaneous measurements, 1951, 1956, 1966, 1967, 1969.

GAGE.--Water-stage recorder. Datum of gage is 40.16 ft (12.241 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1970, nonrecording gage at same site (at different datum May 1907 to March 1908, and at present datum June 9, 1966 to Aug. 12, 1970).

REMARKS.--Records good except those for winter periods, which are poor. Flow from 256 mi^2 (663 km^2) of drainage area regulated by Ashokan Reservoir since Sept. 9, 1913. Water diverted from Schoharie Creek through Shandaken Tunnel (see Reservoirs in Hudson River Basin) since Feb. 3, 1924, enters Esopus Creek about 12.2 mi (31.6 km) above Ashokan Reservoir. Diversion from Plattekill Creek for water supply of village of Saugerties. Diversions upstream during summer months for irrigation purposes. Diversions for water supply of city of New York made from Ashokan Reservoir (see Reservoirs in Hudson River Basin). Discharge records for this station now represent the natural flow from 112 mi^2 (290 km^2), together with spillage during high stages from the upstream reservoirs.

AVERAGE DISCHARGE.--12 years (1971-82), 537 ft^3/s (15.21 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 28,000 ft^3/s (793 m^3/s) Apr. 26, 1910, gage height, 25.10 ft (7.650 m), datum then in use; minimum, 9.7 ft^3/s (0.27 m^3/s) Sept. 16, 17, 1980, gage height, 11.79 ft (3.594 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,490 ft^3/s (184 m^3/s) June 8, gage height, 19.57 ft (5.965 m); minimum, 23 ft^3/s (0.65 m^3/s) Aug. 31, Sept. 1, 15, 16, 20, 21, 22, gage height, 12.08 ft (3.682 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	165	80	141	100	130	1100	815	161	543	48	54
2	44	145	159	170	270	120	803	611	169	400	44	81
3	47	129	219	204	640	120	863	476	159	326	71	62
4	40	117	224	702	2400	120	2030	389	140	284	62	52
5	36	109	203	2850	1820	120	1130	313	295	243	49	44
6	34	115	177	1460	1120	130	797	259	2900	195	43	37
7	38	121	158	869	700	140	645	226	4080	159	40	33
8	38	104	145	592	530	150	561	206	6070	136	36	31
9	34	95	135	425	460	160	500	183	3740	119	36	29
10	32	90	123	300	360	169	460	169	2250	104	51	28
11	31	86	114	240	290	175	509	157	1330	91	48	26
12	29	80	106	180	270	267	543	148	857	100	50	25
13	28	76	99	160	260	500	534	140	611	120	46	25
14	28	72	92	140	250	726	526	128	705	100	40	24
15	28	73	97	130	219	907	464	119	574	86	36	23
16	27	78	104	120	228	869	414	111	425	88	33	24
17	26	77	96	120	253	821	433	105	422	83	31	26
18	27	78	94	120	230	815	2020	98	396	79	31	26
19	40	77	86	110	219	888	3670	93	290	70	30	25
20	41	82	73	110	210	857	3270	89	270	70	29	23
21	37	114	69	110	200	946	2310	86	230	75	28	23
22	29	111	76	100	190	913	1720	80	193	69	26	23
23	36	106	94	100	180	972	1330	84	267	59	25	33
24	83	105	152	96	170	913	1010	107	235	53	24	51
25	82	100	174	92	160	857	726	116	187	49	26	43
26	91	96	175	90	150	1090	597	108	159	44	34	36
27	174	94	167	84	140	1010	1530	93	145	42	34	42
28	414	93	163	82	130	710	1810	83	253	64	29	57
29	342	86	156	80	---	680	1440	107	583	78	26	54
30	248	82	149	78	---	640	1100	133	1100	64	24	51
31	197	---	131	86	---	1400	---	148	---	54	23	---
TOTAL	2413	2956	4090	10141	12149	18315	34845	5980	29196	4047	1153	1111
MEAN	77.8	98.5	132	327	434	591	1162	193	973	131	37.2	37.0
MAX	414	165	224	2850	2400	1400	3670	815	6070	543	71	81
MIN	26	72	69	78	100	120	414	80	140	42	23	23

CAL YR 1981 TOTAL 84868 MEAN 233 MAX 5280 MIN 14
WTR YR 1982 TOTAL 126396 MEAN 346 MAX 6070 MIN 23

HUDSON RIVER BASIN

01365000 RONDOUT CREEK NEAR LOWES CORNERS, NY

LOCATION.--Lat 41°52'00", long 74°29'12", Sullivan County, Hydrologic Unit 02020007, on left bank 100 ft (30 m) downstream from small tributary, 350 ft (107 m) upstream from bridge on county road, 1.1 mi (1.8 km) upstream from Sugarloaf Brook, 1.1 mi (1.8 km) east of Lowes Corners, and 1.9 mi (3.1 km) southwest of Sundown.

DRAINAGE AREA.--38.5 mi² (99.7 km²).

PERIOD OF RECORD.--February 1937 to current year.

REVISED RECORDS.--WSP 1702: 1952.

GAGE.--Water-stage recorder. Datum of gage is 874.44 ft (266.529 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 4, 1938, nonrecording gage at highway bridge 350 ft (107 m) downstream at datum 847.00 ft (258.166 m) NGVD (levels by Board of Water Supply, City of New York). Oct. 4, 1938 to July 5, 1951, water-stage recorder at site 1.2 mi (1.9 km) downstream; Oct. 4, 1938 to July 3, 1949, datum 847.00 ft (258.166 m) NGVD and July 4, 1949 to July 5, 1951, datum 846.00 ft (257.861 m) NGVD (levels by Board of Water Supply, City of New York).

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--45 years, 97.8 ft³/s (2.770 m³/s), 34.49 in/yr (876 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 7,600 ft³/s (215 m³/s) July 22, 1938, from rating curve extended above 2,600 ft³/s (73.6 m³/s); maximum gage height, 10.5 ft (3.200 m) Mar. 21, 1980; minimum discharge, 3.3 ft³/s (0.09 m³/s) Sept. 16, 17, Oct. 17, 18, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 3	2015	1,320	37.4	4.92	1.500
Apr. 18	0145	*2,490	70.5	*6.01	1.832
June 7	0030	1,900	53.8	5.46	1.664

Minimum discharge, 11 ft³/s (0.31 m³/s) Aug. 30, 31, Sept. 1, 11, 12, 13, 14, 15, 19, 20; minimum gage height, 2.38 ft (0.725 m), Aug. 30, 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	99	43	39	64	32	687	160	96	107	35	88
2	29	92	87	40	78	31	454	141	121	100	24	33
3	16	84	85	39	299	30	589	128	107	96	31	27
4	14	82	74	185	525	30	669	118	102	92	23	18
5	14	67	67	199	322	31	389	111	118	85	21	15
6	15	87	64	130	229	31	309	107	644	78	20	14
7	23	84	61	110	160	32	244	102	799	71	19	13
8	21	64	63	100	130	34	206	98	293	61	18	13
9	19	55	58	90	120	35	173	94	178	52	20	13
10	19	49	50	80	110	37	155	88	138	49	19	13
11	20	49	49	70	100	39	149	78	123	46	16	12
12	20	46	48	60	98	85	143	67	116	55	16	11
13	21	41	44	54	94	110	139	64	123	46	15	11
14	18	39	43	47	95	131	150	55	128	39	15	11
15	18	46	47	44	90	130	147	52	111	37	14	12
16	17	46	47	42	97	129	159	46	102	35	14	18
17	18	49	41	40	92	128	342	41	107	33	14	13
18	22	46	41	38	84	126	1190	39	96	31	15	12
19	43	41	36	37	83	133	516	39	87	29	13	12
20	25	58	35	36	73	138	383	37	82	39	13	11
21	22	67	33	35	65	142	320	37	71	33	14	12
22	21	58	39	34	55	145	254	35	64	27	13	13
23	30	49	77	34	47	147	211	49	82	24	13	24
24	63	48	75	33	42	151	185	55	55	23	13	19
25	38	46	51	33	40	190	167	44	49	21	21	14
26	60	44	47	32	38	369	301	35	44	20	19	13
27	116	49	47	33	36	282	430	33	44	20	13	26
28	189	47	45	32	34	211	280	29	49	44	13	24
29	151	44	44	31	---	175	218	84	169	29	12	18
30	131	40	41	31	---	181	182	78	128	21	12	15
31	113	---	39	45	---	381	---	100	---	33	11	---
TOTAL	1346	1716	1621	1853	3300	3846	9741	2244	4426	1476	529	548
MEAN	43.4	57.2	52.3	59.8	118	124	325	72.4	148	47.6	17.1	18.3
MAX	189	99	87	199	525	381	1190	160	799	107	35	88
MIN	14	39	33	31	34	30	139	29	44	20	11	11
CFSM	1.13	1.49	1.36	1.55	3.07	3.22	8.44	1.88	3.84	1.24	.44	.48
IN.	1.30	1.66	1.57	1.79	3.19	3.72	9.41	2.17	4.28	1.43	.51	.53

CAL YR 1981 TOTAL 26664.6 MEAN 73.1 MAX 1700 MIN 9.8 CFSM 1.90 IN 25.76
WTR YR 1982 TOTAL 32646.0 MEAN 89.4 MAX 1190 MIN 11 CFSM 2.32 IN 31.54

01365500 CHESTNUT CREEK AT GRAHAMSVILLE, NY

LOCATION.--Lat 41°50'42", long 74°32'27", Sullivan County, Hydrologic Unit 02020007, on right bank just downstream from bridge in Grahamsville, 600 ft (183 m) downstream from Red Brook, and 0.6 mi (1.0 km) upstream from bridge on State Highway 55.

DRAINAGE AREA.--20.9 mi^2 (54.1 km^2).

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 880.96 ft (268.516 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods, which are poor. Slight seasonal regulation caused by Beaverdam Pond on Red Brook.

AVERAGE DISCHARGE.--44 years, 39.0 ft^3/s (1.104 m^3/s), 25.34 in/yr (644 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,640 ft^3/s (131 m^3/s) Oct. 15, 1955, gage height, 5.02 ft (1.530 m), from rating curve extended above 1,300 ft^3/s (36.8 m^3/s) on basis of slope-area measurement at gage height 4.68 ft (1.426 m); minimum, 1.4 ft^3/s (0.040 m^3/s) Nov. 1, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s (14 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 31	2115	726	20.6	2.29	0.698	Apr. 18	0130	*829	23.5	*2.39	0.728
Apr. 3	1815	800	22.7	2.36	0.719						

Minimum discharge, 4.2 ft^3/s (0.12 m^3/s) Sept. 15, 17, 18, 19, 20, 26, 27; minimum gage height, 0.52 ft (0.158 m) Oct. 1, Sept. 11, 12-14, 15, 17, 18, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	17	14	17	25	16	303	62	31	24	11	10
2	14	17	37	18	44	15	181	57	91	20	11	7.6
3	10	18	31	19	158	15	308	53	43	17	10	9.1
4	8.1	14	24	129	204	15	278	46	36	17	9.1	6.7
5	6.7	14	22	125	118	15	163	43	30	15	9.1	5.9
6	7.6	20	20	80	91	15	121	39	80	14	8.1	5.5
7	10	19	18	60	72	16	102	37	157	13	8.1	5.1
8	8.1	15	18	39	60	17	91	32	78	11	7.6	5.1
9	7.2	14	18	36	50	18	83	31	55	10	8.6	5.1
10	6.3	12	15	24	41	19	83	28	39	9.7	8.6	4.8
11	5.9	12	15	23	38	20	85	26	32	10	7.2	4.8
12	6.3	12	15	22	35	22	80	26	30	12	6.7	4.5
13	7.6	11	15	21	32	68	85	30	62	10	6.3	4.5
14	6.7	11	15	20	30	85	91	24	75	9.1	6.3	4.5
15	6.3	12	16	19	29	94	85	24	44	9.1	6.3	4.8
16	5.9	13	16	19	39	88	88	22	28	9.7	5.9	5.5
17	5.9	14	15	18	37	85	135	21	37	9.1	6.7	4.5
18	8.1	13	15	18	31	80	329	18	34	8.1	6.7	4.2
19	14	12	14	17	30	83	150	18	30	8.1	6.3	4.2
20	8.6	20	14	16	28	102	105	19	27	14	6.3	4.2
21	8.1	21	14	16	28	102	91	17	22	10	6.3	4.8
22	7.6	17	15	15	27	121	80	18	21	8.6	5.5	5.1
23	10	15	32	15	24	102	68	26	27	8.6	5.9	7.6
24	15	16	36	15	22	118	60	28	21	8.1	5.9	5.9
25	10	14	26	15	20	150	48	23	18	7.6	11	5.1
26	14	14	23	14	19	224	115	19	15	7.2	7.2	4.5
27	31	14	20	14	18	131	150	15	14	7.2	6.3	18
28	75	14	20	14	17	96	99	14	15	18	5.9	11
29	31	14	19	13	---	88	83	37	60	11	5.1	8.1
30	23	13	18	13	---	90	71	28	43	8.6	5.1	6.7
31	20	---	17	15	---	224	---	41	---	13	5.1	---
TOTAL	406.1	442	607	899	1367	2334	3811	922	1295	357.8	225.2	187.4
MEAN	13.1	14.7	19.6	29.0	48.8	75.3	127	29.7	43.2	11.5	7.26	6.25
MAX	75	21	37	129	204	224	329	62	157	24	11	18
MIN	5.9	11	14	13	17	15	48	14	14	7.2	5.1	4.2
CFSM	.63	.70	.94	1.39	2.34	3.60	6.08	1.42	2.07	.55	.35	.30
IN.	.72	.79	1.08	1.60	2.43	4.15	6.78	1.64	2.30	.64	.40	.33

CAL YR 1981 TOTAL 10840.2 MEAN 29.7 MAX 687 MIN 3.6 CFSM 1.42 IN 19.29
WTR YR 1982 TOTAL 12853.5 MEAN 35.2 MAX 329 MIN 4.2 CFSM 1.68 IN 22.88

01367500 RONDOUT CREEK AT ROSENDALE, NY

LOCATION.--Lat 41°50'35", long 74°05'11", Ulster County, Hydrologic Unit 02020007, on left bank 30 ft (9 m) upstream from bridge on James Street in Rosendale, and 3 mi (5 km) upstream from Wallkill River.

DRAINAGE AREA.--386 mi² (1,000 km²) (see REMARKS below).

PERIOD OF RECORD.--July 1901 to November 1903, October 1905 to January 1919, August 1926 to current year. Monthly discharge only for some periods, published in WSP 1302, and WRD NY 1970.

REVISED RECORDS.--WSP 641: Drainage Area. WSP 756: 1933.

GAGE.--Water-stage recorder. Datum of gage is 32.83 ft (10.007 m) National Geodetic Vertical Datum of 1929. Prior to January 1919, nonrecording gage at site 150 ft (46 m) downstream at datum 38.83 ft (11.835 m) NGVD. Aug. 3, 1926 to Sept. 10, 1969, at present site at datum 42.83 ft (13.055 m) NGVD. Sept. 11, 1969 to Feb. 3, 1970, water-stage recorder, and June 9, 1970 to Jan. 18, 1971, nonrecording gage at site 0.2 mi (0.3 km) upstream at datum 44.03 ft (13.420 m) NGVD.

REMARKS.--Records good except those for winter periods and those for period of no gage height record, Apr. 2 to May 10, which are poor. Occasional regulation from hydroelectric plant upstream from station. Diversion from Rondout Creek through the emergency connection to the Delaware Aqueduct at Lackawack for New York City water supply during period April 1944 to May 1951. Since October 1950, flow regulated by Rondout Reservoir (see Reservoirs in Hudson River Basin). Subsequent to May 1951, entire flow except for period of spilling, diverted from Rondout Reservoir for New York City water supply. Discharge records for this station now represent the natural flow from 272 mi² (704 km²), together with spillage during high flow from Rondout Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,800 ft³/s (1,010 m³/s) Oct. 16, 1955, gage height, 36.8 ft (11.22 m), datum then in use, from floodmarks, from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of contracted-opening measurement at gage height 33.93 ft (10.342 m); minimum, 2.2 ft³/s (0.062 m³/s) July 16, 1965, minimum daily, 3.0 ft³/s (0.085 m³/s) July 16, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,540 ft³/s (242 m³/s) June 7, gage height, 15.77 ft (4.807 m), maximum gage height, 16.91 ft (5.154 m) Feb. 4 (ice jam), minimum discharge, 47 ft³/s (1.33 m³/s) Oct. 1, 17, 18, gage height, 8.78 ft (2.676 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	232	130	458	900	300	2160	920	940	511	221	70
2	60	193	353	560	1900	290	1600	800	1000	372	196	81
3	86	183	554	627	2870	290	2100	700	897	302	158	89
4	72	176	425	1760	3500	300	2900	620	759	280	146	96
5	60	161	357	3800	2000	310	2400	560	721	236	125	81
6	57	173	315	1950	1400	310	2000	500	3890	200	122	73
7	62	196	276	1370	1100	320	1700	460	6140	186	110	70
8	71	170	260	994	900	340	1500	420	2530	173	100	66
9	71	152	240	698	740	350	1300	390	1560	161	119	66
10	72	138	230	660	620	360	1200	350	985	146	280	64
11	71	127	203	640	560	367	1300	333	743	132	207	64
12	67	122	183	620	540	627	1400	306	627	132	161	61
13	71	117	164	600	500	1320	1600	311	614	135	127	61
14	64	114	158	600	490	1680	1500	315	1670	119	114	59
15	54	119	173	580	470	1880	1300	284	1000	112	107	61
16	51	135	203	560	458	1660	1200	280	728	110	103	105
17	48	141	232	560	580	1570	1900	268	1170	107	96	105
18	49	158	193	540	542	1600	2400	221	949	103	100	81
19	54	152	240	540	475	1880	2000	210	706	98	98	71
20	69	155	332	520	452	1880	1700	240	580	210	91	68
21	69	247	400	520	430	2010	1500	263	475	228	89	71
22	62	232	540	520	410	1980	1300	221	403	149	85	79
23	62	193	662	500	390	2060	1100	247	535	119	81	132
24	105	176	1150	500	370	1920	920	393	441	110	81	221
25	168	164	822	500	360	1900	900	382	343	103	89	132
26	177	149	669	490	340	2420	1400	302	311	96	130	103
27	284	138	600	490	320	2180	1700	247	284	89	110	132
28	529	143	499	480	310	1570	1500	217	293	186	87	236
29	464	138	393	480	---	1180	1200	487	372	247	77	193
30	315	127	419	480	---	976	1000	940	871	161	70	161
31	251	---	414	520	---	1160	---	888	---	127	68	---
TOTAL	3744	4821	11789	24117	23927	36990	47680	13075	32537	5440	3748	2952
MEAN	121	161	380	778	855	1193	1589	422	1085	175	121	98.4
MAX	529	247	1150	3800	3500	2420	2900	940	6140	511	280	236
MIN	48	114	130	458	310	290	900	210	284	89	68	59

CAL YR 1981 TOTAL 142804 MEAN 391 MAX 8390 MIN 24
WTR YR 1982 TOTAL 210820 MEAN 578 MAX 6140 MIN 48

01371500 WALLKILL RIVER AT GARDINER, NY

LOCATION.--Lat 41°41'10", long 74°09'56", Ulster County, Hydrologic Unit 02020007, on left bank 400 ft (122 m) upstream from bridge on U.S. Highway 44, 500 ft (152 m) downstream from Shawangunk Kill, and 0.7 mi (1.1 km) northwest of Gardiner.

DRAINAGE AREA.--711 mi^2 (1,841 km^2).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.70 ft (56.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--58 years, 1,050 ft^3/s (29.74 m^3/s), 20.06 in/yr (510 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,800 ft^3/s (872 m^3/s) Oct. 16, 1955, gage height, 19.81 ft (6.038 m). minimum, 9.5 ft^3/s (0.27 m^3/s) Sept. 28, 1964, minimum gage height, 1.59 ft (0.48 m) Aug. 14, 15, 16, 19, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 6,400 ft^3/s (181 m^3/s):

Date	Time	Discharge (ft^3/s)	(m^3/s)	Gage height (ft)	(m)
Feb. 4	1730	a8,000	227	b12.27	3.740

a Estimated.
b Ice jam.

Minimum discharge, 60 ft^3/s (1.70 m^3/s), Oct. 1, gage height, 1.97 ft (0.600 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	263	188	500	350	580	1960	1630	2170	2350	874	218
2	96	222	498	500	600	560	1540	1330	2080	1880	1110	222
3	174	191	908	700	1500	540	1730	1160	1480	1440	650	246
4	181	174	801	2500	7600	520	3690	1050	1160	1000	462	250
5	147	164	602	4800	5800	520	3020	934	1120	849	384	238
6	124	181	486	4310	4500	530	2490	841	2700	709	337	210
7	121	195	405	3600	3500	540	2060	785	3640	581	294	184
8	116	199	330	3160	3000	3000	1980	723	2420	504	259	188
9	108	195	270	2210	2400	3500	2080	672	1720	450	709	174
10	103	177	240	1400	2000	3190	2210	629	1260	394	2090	164
11	103	164	220	1300	1700	2140	2940	581	995	363	1120	160
12	99	157	210	1100	1500	2700	2730	529	833	347	785	154
13	99	147	210	920	1300	4030	2290	523	1450	428	581	135
14	96	138	210	840	1200	3860	2170	523	3860	549	439	103
15	96	138	220	760	1000	3820	1830	474	2860	468	368	106
16	94	147	240	680	1000	3320	1540	428	2120	373	318	132
17	94	164	300	600	1400	3170	1380	394	2590	323	281	160
18	96	181	352	540	1100	3140	2250	368	2260	294	250	144
19	103	188	422	500	940	3140	2190	363	1680	272	234	135
20	101	199	600	450	860	3010	1810	925	1410	352	222	127
21	101	263	500	400	800	2860	1510	511	1130	951	206	130
22	101	318	450	360	740	2640	1300	400	925	908	195	141
23	114	304	430	330	700	2370	1150	384	1050	723	188	214
24	138	255	500	300	680	2080	1020	517	1130	523	177	373
25	154	222	740	280	640	1810	925	609	934	394	230	347
26	184	199	620	260	620	1790	960	542	731	332	762	272
27	226	195	560	240	620	1910	2740	456	629	299	701	246
28	358	195	540	230	600	1530	2520	389	595	313	468	328
29	439	188	580	220	---	1250	2570	1580	665	368	352	332
30	422	184	600	220	---	1130	2080	2340	2360	332	285	299
31	332	---	520	220	---	1160	---	2470	---	304	234	---
TOTAL	4786	5907	13752	34430	48650	66340	60665	25060	49957	19373	15565	6132
MEAN	154	197	444	1111	1738	2140	2022	808	1665	625	502	204
MAX	439	318	908	4800	7600	4030	3690	2470	3860	2350	2090	373
MIN	66	138	188	220	350	520	925	363	595	272	177	103
CFSM	.22	.28	.62	1.56	2.44	3.01	2.84	1.14	2.34	.88	.71	.29
IN.	.25	.31	.72	1.80	2.55	3.47	3.17	1.31	2.61	1.01	.81	.32

CAL YR 1981 TOTAL 220680 MEAN 605 MAX 6550 MIN 19 CFSM .85 IN 11.55
WTR YR 1982 TOTAL 350617 MEAN 961 MAX 7600 MIN 66 CFSM 1.35 IN 18.34

01372500 WAPPINGER CREEK NEAR WAPPINGERS FALLS, NY

LOCATION.--Lat 41°39'11", long 73°52'23", Dutchess County, Hydrologic Unit 02020008, on left bank 700 ft (213 m) downstream from Red Oak Mill dam, and 4.5 mi (7.2 km) northeast of village of Wappingers Falls.

DRAINAGE AREA.--181 mi² (469 km²).

PERIOD OF RECORD.--May 1903 to June 1905 (gage heights only during some winter months), August 1928 to current year.

REVISED RECORDS.--WSP 741: 1932. WSP 1902: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 114.37 ft (34.860 m) National Geodetic Vertical Datum of 1929, (levels by Corps of Engineers). May 1903 to June 1905 staff gage at site 2.5 mi (4.0 km) downstream at different datum. Aug. 7, 1928 to Sept. 25, 1931, water-stage recorder at site 2 mi (3 km) downstream at different datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--54 years (1929-82), 252 ft³/s (7.137 m³/s), 18.91 in/yr (480 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft³/s (527 m³/s) Aug. 19, 1955, gage height, 19.60 ft (5.974 m), from floodmarks in gage shelter, from rating curve extended above 5,000 ft³/s (140 m³/s) on basis of flow-over-dam and contracted-opening measurement at gage height 18.02 ft (5.492 m) and contracted-opening and flow-over-road measurement at gage height 19.60 ft (5.974 m); minimum, 0.90 ft³/s (0.025 m³/s) Sept. 20, 21, 1964, gage height, 2.05 ft (0.625 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	1000	1,880	53.2	6.43	1.960
Feb. 3	1100	Unknown		*a9.65	2.941
Feb. 4	0400	*2,850	80.7	7.63	2.326
June 7	0645	2,650	75.0	7.39	2.252

a Ice jam.

Minimum discharge, 12 ft³/s (0.340 m³/s) Oct. 1, gage height, 2.44 ft (0.744 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	46	40	110	590	170	635	351	169	260	73	25
2	21	41	107	160	1200	160	545	321	223	213	67	27
3	25	38	144	210	1600	160	496	297	219	186	64	32
4	22	35	116	400	2500	160	891	282	154	169	57	34
5	20	34	99	1700	1400	160	754	260	260	146	55	34
6	21	38	88	1290	1100	180	647	239	1360	132	51	33
7	20	46	79	911	800	250	568	229	2370	121	47	28
8	18	47	66	680	600	568	598	213	1490	111	43	25
9	17	42	60	501	500	373	574	207	965	102	89	25
10	16	38	56	320	450	294	563	197	693	96	112	23
11	15	36	52	300	400	309	680	180	540	89	83	24
12	14	34	50	280	380	480	740	171	459	85	68	20
13	16	32	48	260	350	686	699	166	464	85	59	20
14	17	30	47	250	350	825	693	156	958	76	53	20
15	16	31	46	230	350	878	610	144	719	71	48	21
16	15	32	50	210	450	818	545	134	528	68	44	25
17	15	34	65	200	523	825	501	127	761	65	41	22
18	17	37	82	190	405	859	673	119	622	61	38	20
19	23	40	60	180	368	905	610	118	501	57	35	19
20	32	45	56	170	351	846	506	134	480	158	33	19
21	27	64	54	160	368	853	464	138	419	210	33	21
22	23	60	58	160	334	818	444	121	355	121	36	25
23	23	52	64	160	305	775	449	116	444	93	37	30
24	39	48	110	160	286	699	405	127	368	81	31	28
25	57	50	98	160	200	635	347	130	294	71	45	27
26	53	47	90	150	190	654	334	114	253	61	48	25
27	58	46	86	140	180	667	680	101	232	55	41	24
28	85	45	84	140	180	534	551	93	239	85	35	23
29	85	43	88	140	---	469	449	144	246	127	30	23
30	64	39	94	140	---	434	396	177	368	91	28	22
31	54	---	100	160	---	429	---	158	---	79	25	---
TOTAL	942	1250	2337	10222	16710	16873	17047	5464	17153	3425	1549	744
MEAN	30.4	41.7	75.4	330	597	544	568	176	572	110	50.0	24.8
MAX	85	64	144	1700	2500	905	891	351	2370	260	112	34
MIN	14	30	40	110	180	160	334	93	154	55	25	19
CFSM	.17	.23	.42	1.82	3.30	3.01	3.14	.97	3.16	.61	.28	.14
IN.	.19	.26	.48	2.10	3.43	3.47	3.50	1.12	3.53	.70	.32	.15

CAL YR 1981 TOTAL 52205 MEAN 143 MAX 1490 MIN 12 CFSM .79 IN 10.73
WTR YR 1982 TOTAL 93716 MEAN 257 MAX 2500 MIN 14 CFSM 1.42 IN 19.26

01375000 CROTON RIVER AT NEW CROTON DAM, NEAR CROTON-ON-HUDSON, NY

LOCATION.--Lat 41°13'32", long 73°51'32", Westchester County, Hydrologic Unit 02030101, on left bank 1,000 ft (305 m) downstream from New Croton Dam, and 1.8 mi (2.9 km) northeast of Croton-On-Hudson.

DRAINAGE AREA.--378 mi^2 (979 km^2).

PERIOD OF RECORD.--August 1933 to current year. Prior to Oct. 1, 1941, published as "at Quaker Bridge," (low-flow records at this site are not equivalent owing to well pumpage upstream). Fragmentary records published during August 1933 to September 1941 for "at Cornell Dam near Croton" and "at New Croton near Croton" are equivalent. Oct. 1, 1941 to Sept. 30, 1955 published as "at New Croton Dam near Croton".

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 50 ft (15 m), from topographic map. Prior to Oct. 1, 1941, supplementary water-stage recorder and concrete control at site 1.1 mi (1.8 km) downstream at Quaker Bridge.

REMARKS.--Records fair except for those below 10 ft^3/s (0.283 m^3/s), which are poor. Entire flow, except for periods of spilling and releases to augment Croton-on-Hudson water supply, diverted from New Croton Reservoir for municipal supply of City of New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,400 ft^3/s (1,290 m^3/s) Oct. 16, 1955, gage height, 18.44 ft (5.621 m), from floodmarks, from rating curve extended above 9,700 ft^3/s (275 m^3/s) on basis of slope-area measurements of peak flow; minimum daily, 0.1 ft^3/s (0.003 m^3/s) Mar. 14, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft^3/s (66.0 m^3/s) June 8, gage height, 5.03 ft (1.533 m); minimum, 0.28 ft^3/s (0.008 m^3/s) Oct. 3, 4, 5, 6, gage height, 0.30 ft (0.091 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.53	1.1	1.4	.82	173	363	931	494	838	77	91
2	.57	.50	2.6	1.4	.76	193	351	845	435	567	48	149
3	.31	.48	1.5	1.1	.90	220	456	771	407	328	41	138
4	.31	.47	1.2	4.3	1.2	256	869	630	388	240	64	106
5	.28	.47	1.1	3.2	2.0	278	923	456	464	193	99	106
6	.34	.58	1.0	1.9	486	278	830	381	939	157	113	99
7	.34	.68	1.1	1.6	908	369	757	363	1730	137	90	90
8	.34	.62	.98	1.2	923	645	845	339	2200	124	80	82
9	.34	.58	1.0	1.1	853	619	823	339	2120	92	197	88
10	.34	.54	.96	1.1	739	498	779	351	1640	53	261	97
11	.34	.52	.96	.97	351	344	876	273	1260	39	157	95
12	.41	.51	1.0	.89	363	363	869	220	995	345	110	89
13	.37	.49	1.0	.82	363	407	815	230	1010	542	77	85
14	.41	.48	.97	.94	351	414	764	256	1680	322	64	76
15	.41	.57	1.5	1.1	290	414	658	295	1380	202	61	71
16	.41	.70	1.5	.94	165	435	576	300	1110	133	59	67
17	.41	.80	1.1	.88	225	639	550	295	1270	80	40	46
18	.53	.90	1.0	.84	278	639	808	284	1160	31	32	25
19	.53	.93	.93	.80	306	593	764	256	923	14	32	9.1
20	.44	.97	.85	.78	322	542	621	256	771	107	74	12
21	.41	.93	.81	.76	317	542	550	333	621	240	115	24
22	.41	.89	.81	.72	300	509	517	449	525	173	107	51
23	.53	1.0	1.0	.78	300	501	525	449	478	124	82	64
24	.63	1.0	1.1	.86	357	534	688	428	414	61	84	62
25	.50	.97	.93	1.0	375	509	757	351	328	30	185	58
26	.70	.97	.89	.92	240	494	892	317	306	15	203	57
27	.73	1.0	.93	.85	206	442	1650	278	317	5.9	141	82
28	.81	.97	1.0	.81	193	394	1620	261	267	31	123	60
29	.63	.93	.93	.77	---	369	1320	534	363	97	110	72
30	.57	.93	.93	.74	---	357	1090	509	915	82	88	38
31	.53	---	.89	.72	---	363	---	567	---	57	79	---
TOTAL	14.38	21.91	33.57	36.19	9216.68	13333	23906	12547	26910	5459.9	3093	2189.1
MEAN	.46	.73	1.08	1.17	329	430	797	405	897	176	99.8	73.0
MAX	.81	1.0	2.6	4.3	923	645	1650	931	2200	838	261	149
MIN	.28	.47	.81	.72	.76	173	351	220	267	5.9	32	9.1

CAL YR 1981 TOTAL 500.18 MEAN 1.37 MAX 7.0 MIN .28
WTR YR 1982 TOTAL 96760.73 MEAN 265 MAX 2200 MIN .28

01376500 SAW MILL RIVER AT YONKERS, NY

LOCATION.--Lat 40°56'14", long 73°53'21", Westchester County, Hydrologic Unit 02030101, on right bank in Yonkers, 1,200 ft (366 m) downstream from Old Croton aqueduct, near intersection of Nepperhan Avenue and Walsh Avenue, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--25.6 mi^2 (66.3 km^2).

PERIOD OF RECORD.--November 1943 to September 1973, April 1974 to current year.

REVISED RECORDS.--WRD NY 1971: 1965, 1966.

GAGE.--Water-stage recorder crest-stage gage. Datum of gage is 80.10 ft (24.414 m) National Geodetic Vertical Datum of 1929. Oct. 1, 1978 to Sept. 9, 1980, nonrecording and crest-stage gage at same site and datum. Prior to August 17, 1978, water-stage recorder and concrete control 1,300 ft (396 m) upstream at datum 10.89 ft (3.319 m) higher.

REMARKS.--Records fair except those for period of no gage height record, Jan. 8-26, which are poor. Flow affected by diversion by city of Yonkers, village of Tarrytown, and several industries for water supply and industrial purposes. Diurnal fluctuations caused by water supply and industrial operations.

COOPERATION.--Figures for diversion and return in upstream water supply furnished by city of Yonkers and village of Tarrytown.

AVERAGE DISCHARGE.--37 years (1945-73, 1975-82), 32.3 ft^3/s (0.915 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,020 ft^3/s (28.9 m^3/s) Sept. 27, 1975, gage height, 7.26 ft (2.213 m); minimum, no flow during part of several days in Oct., Nov., and June-Sept. of 1981 water year because of construction in channel upstream from gage; minimum daily, 0.11 ft^3/s (0.003 m^3/s) Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 452 ft^3/s (12.8 m^3/s) Jan. 4, gage height, 3.18 ft (0.969 m), minimum, 0.24 ft^3/s (0.007 m^3/s), July 23, 26, gage height 0.19 ft (0.058 m); minimum daily, 0.75 ft^3/s (0.021 m^3/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.5	23	65	150	14	44	52	30	29	31	5.8
2	79	3.8	159	59	77	13	20	46	35	18	10	17
3	7.7	3.5	46	26	260	12	63	44	20	25	9.0	24
4	1.2	3.0	25	250	130	14	175	37	11	30	7.7	5.2
5	1.2	2.6	13	130	70	16	56	35	33	20	8.1	2.4
6	2.0	32	9.5	70	52	20	48	32	74	20	7.7	2.0
7	1.5	11	8.6	50	45	55	49	30	72	17	7.7	1.6
8	1.2	3.5	12	45	40	71	55	29	31	17	7.3	1.1
9	1.3	2.8	13	40	36	27	52	27	20	17	48	1.6
10	1.2	2.2	6.9	37	33	24	55	27	17	14	27	1.6
11	3.0	2.4	5.8	35	30	25	65	23	14	14	11	.86
12	3.5	2.4	4.6	33	28	39	56	23	13	32	13	.75
13	2.6	1.5	4.0	32	26	35	49	29	49	48	9.9	.86
14	1.2	1.5	5.8	31	25	34	47	23	107	20	8.6	3.0
15	1.2	3.5	97	30	25	28	36	20	39	13	9.0	4.0
16	2.2	12	165	31	29	27	33	20	32	14	7.7	4.3
17	1.5	6.9	55	30	29	51	32	19	146	13	6.9	4.0
18	11	11	32	29	23	39	98	26	43	11	3.2	3.5
19	49	4.6	23	28	27	30	44	26	25	13	6.6	3.5
20	4.3	20	17	28	29	29	34	29	23	59	6.6	8.1
21	1.2	15	13	27	27	33	34	23	21	35	6.2	13
22	1.2	2.4	17	27	24	35	32	22	17	14	5.5	8.6
23	28	2.8	24	41	22	28	28	34	22	11	10	15
24	111	2.8	35	60	20	23	25	39	14	9.5	7.3	8.1
25	25	2.4	20	32	18	23	24	24	11	9.0	60	5.5
26	100	1.8	16	25	17	32	76	21	11	9.9	25	4.6
27	60	2.2	18	20	16	29	187	19	37	11	4.9	36
28	90	2.6	26	19	15	23	123	16	18	72	3.0	15
29	40	2.6	18	18	---	23	71	114	44	26	1.5	6.6
30	15	2.0	15	18	---	22	55	36	111	11	2.0	5.2
31	7.0	---	13	35	---	33	---	43	---	10	1.6	---
TOTAL	658.5	171.3	940.2	1401	1323	907	1766	988	1140	662.4	373.0	212.77
MEAN	21.2	5.71	30.3	45.2	47.3	29.3	58.9	31.9	38.0	21.4	12.0	7.09
MAX	111	32	165	250	260	71	187	114	146	72	60	36
MIN	1.2	1.5	4.0	18	15	12	20	16	11	9.0	1.5	.75
‡	6.27	8.57	9.83	8.16	6.28	8.59	7.35	4.85	8.05	1.65	2.56	3.00

CAL YR 1981 TOTAL 7789.79 MEAN 21.3 MAX 215 MIN .11 ‡ 5.11
WTR YR 1982 TOTAL 10543.17 MEAN 28.9 MAX 260 MIN .75 ‡ 6.26

‡ Indicated net diversion, in cubic feet per second, for diversion and return in upstream supply.

RESERVOIRS IN HUDSON RIVER BASIN

01335900 DELTA RESERVOIR.--Lat 43°16'20", long 75°25'50", Oneida County, Hydrologic Unit 02020004, on superstructure of gatehouse at Delta Dam on Mohawk River, and 4 mi (6 km) upstream from Rome. DRAINAGE AREA, 145 mi^2 (376 km^2). PERIOD OF RECORD, May 1913 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Dam completed Aug. 3, 1912, and controlled storage for which records are available began May 1, 1913. Usable capacity 2,800 mil ft^3 (79.3 hm^3) at crest of spillway, elevation 550.0 ft (167.64 m). Reservoir is used for navigation in Barge Canal. Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD (1951-81): Maximum contents observed, 3,136 mil ft^3 (88.8 hm^3) June 22, 1972, elevation, 552.8 ft (168.49 m); minimum observed 2.0 mil ft^3 (0.0566 hm^3) Jan. 10, 13, 16-21, Feb. 7-15, Feb. 22 to Mar. 2, 1959, elevation, 492.0 ft (149.96 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,052 mil ft^3 (86.4 hm^3) Oct. 28, elevation, 552.1 ft (168.28 m), minimum observed, 872 mil ft^3 (24.7 hm^3) Mar. 11 and 12, elevation, 528.2 ft (161.00 m).

01343900 HINCKLEY RESERVOIR.--Lat 43°18'45", long 75°06'25", Oneida County, Hydrologic Unit 02020004, on south side of north gatehouse at Hinckley Dam on West Canada Creek at Hinckley, and 2.2 mi (3.5 km) east of Prospect. DRAINAGE AREA, 374 mi^2 (969 km^2). PERIOD OF RECORD, March 1914 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is Barge Canal datum.

Reservoir is formed by earth and concrete dam, storage began March 1914. Usable capacity 3,320 mil ft^3 (94.0 hm^3) between elevation 1,173.5 (357.68 m) and 1,225.0 ft (373.38 m). Elevation of inverts of four 60-inch discharge pipes at north end of spillway is 1,169.5 ft (356.46 m), and elevation of inverts of two 42-inch pipes at south end for diverting water to city of Utica is 1,164.25 ft (354.863 m). Crest of Ogee spillway is at elevation 1,225.0 ft (373.38 m). Length of spillway is 400 ft (122 m). Area of water surface at crest elevation is 4.46 mi^2 (11.6 km^2). Records furnished by New York State Department of Transportation.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 4,041 mil ft^3 (114 hm^3) Oct. 2, 1945, elevation, 1,230.2 ft (374.96 m); minimum observed (after initial filling), not determined.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,762 mil ft^3 (107 hm^3) Oct. 29, elevation, 1,228.3 ft (374.39 m), minimum observed, 462 mil ft^3 (13.1 hm^3) Mar. 31, elevation, 1,188.7 ft (362.32 m).

01350100 SCHOHARIE RESERVOIR (see station for mean daily elevations, skeleton capacity table, monthly contents and change in contents).

01363400 ASHOKAN RESERVOIR.--Lat 41°57'01", long 74°12'30", Ulster County, Hydrologic Unit 02020006, at gatehouse located at Dividing Weir Dyke, and 1.6 mi (2.6 km) south of Shokan. DRAINAGE AREA, 256 mi^2 (663 km^2). PERIOD OF RECORD, September 1913 to current year. REVISED RECORDS, WRD NY 1972: 1968. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

The reservoir is formed by the masonry Olive Bridge Dam across Esopus Creek and a series of earth embankments between hills. The reservoir is divided into two basins separated by a weir containing a gatehouse. Storage began Sept. 9, 1913. Usable capacity of West basin 47,180 mil gal (178.6 hm^3) between minimum operating level elevation 495.50 ft (151.028 m) and crest of spillway to East basin, elevation 590.00 ft (179.832 m), dead storage below minimum operating level 2,237 mil gal (8.467 hm^3). Usable capacity of East basin 80,678 mil gal (305.4 hm^3) between elevation 500.00 ft (152.400 m) and crest of spillway, elevation 587.10 ft (178.948 m), no dead storage. Figures given herein represent total contents for each basin. Reservoir impounds water for diversion into Catskill Aqueduct for New York City water supply (see elsewhere in this section). Any flood spillage enters the Esopus Creek channel below Olive Bridge Dam. Records furnished by Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, in West basin, 54,001 mil gal (204.4 hm^3) Mar. 31, 1951, elevation, 594.33 ft (181.152 m), in East basin, 89,411 mil gal (338.4 hm^3) Mar. 31, 1951, elevation, 592.23 ft (180.512 m), minimum observed, in West basin, 9,098 mil gal (34.44 hm^3) Oct. 24, 1926, elevation, 530.56 ft (161.715 m), in East basin, 8,394 mil gal (31.77 hm^3) Oct. 24, 1926, elevation, 525.91 ft (160.297 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, in West basin, 49,118 mil gal (185.9 hm^3) June 7, elevation, 591.83 ft (180.390 m), in East basin, 83,094 mil gal (314.5 hm^3) June 8, elevation, 588.54 ft (179.387 m), minimum observed, in West basin, 34,318 mil gal (129.9 hm^3) Oct. 26, elevation, 576.28 ft (175.650 m), in East basin, 59,216 mil gal (224.1 hm^3) Jan. 3, elevation, 573.50 ft (174.803 m).

01366400 RONDOUT RESERVOIR.--Lat 41°47'57", long 74°25'48", Ulster County, Hydrologic Unit 02020007, at release chamber at Merriman Dam on Rondout Creek, 1.1 mi (1.8 km) upstream from Brandy Brook, and 1.3 mi (2.1 km) northwest of Lackawack. DRAINAGE AREA, 94.4 mi^2 (244 km^2). PERIOD OF RECORD, May 1951 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam; storage began May 10, 1951. Initial filling (to crest of spillway) Mar. 28, 1955. Usable capacity 50,048 mil gal (189 hm^3) between minimum operating level, elevation, 720.00 ft (219.45 m) and crest of spillway, elevation, 840.00 ft (256.03 m). Dead storage below elevation 720.00 ft (219.45 m), 2,387 mil gal (9.03 hm^3). Figures given herein represent total contents. Reservoir impounds water from Rondout Creek; water diverted from Cannonsville Reservoir in the Delaware River basin through West Delaware Tunnel; water diverted from Pepacton Reservoir through East Delaware Tunnel; and water diverted from Neversink Reservoir through Neversink-Grahamsville Tunnel. Water is diverted from Rondout Reservoir for New York City water supply through West Branch Tunnel of Delaware Aqueduct (see elsewhere in this section). Records furnished by Bureau of Water Resources Development, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 53,355 mil gal (201.9 hm^3) June 23, 1972, elevation, 841.34 ft (256.440 m), minimum observed (after initial filling), 8,335 mil gal (31.55 hm^3) Oct. 15, 1957, elevation, 748.75 ft (228.219 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 52,095 mil gal (197.2 hm^3) Apr. 4, elevation, 839.50 ft (255.880 m), minimum, 35,839 mil gal (135.7 hm^3) Sept. 30, elevation, 813.45 ft (247.940 m).

RESERVOIRS IN HUDSON RIVER BASIN--Continued

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	01335900 Delta Reservoir ‡			01343900 Hinckley Reservoir ‡		
Sept. 30	550.1	2,812		1,218.1	2,560	
Oct. 31	550.7	2,884	+ 26.9	1,225.9	3,437	+ 327
Nov. 30	550.0	2,800	- 32.4	1,223.7	3,165	- 105
Dec. 31	547.5	2,515	-106	1,213.3	2,111	- 394
CAL YR 1981	-	-	+ 43.0	-	-	+ 9.16
Jan. 31	537.9	1,562	-356	1,204.9	1,433	- 253
Feb. 28	528.8	908	-270	1,197.6	942	- 203
Mar. 31	538.8	1,642	+274	1,190.4	545	- 148
Apr. 30	550.6	2,872	+475	1,226.5	3,517	+1,147
May 31	549.5	2,740	- 49.3	1,220.8	2,838	- 254
June 30	549.5	2,740	0	1,224.8	3,296	+ 177
July 31	545.0	2,240	-187	1,216.7	2,420	- 327
Aug. 31	539.3	1,687	-206	1,211.9	1,987	- 162
Sept. 30	532.3	1,131	-215	1,203.2	1,312	- 260
WTR YR 1982	-	-	- 53.3	-	-	- 39.6

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01363398	Ashokan Reservoir ‡‡ West Basin		01363399	Ashokan Reservoir ‡‡ East Basin		01366400	Rondout Reservoir ‡‡	
Sept. 30	578.85	38,796		576.83	64,197		837.27	50,588	
Oct. 31	577.78	37,863	- 46.6	575.06	61,468	-136	837.14	50,501	- 4.34
Nov. 30	577.65	37,750	- 5.83	574.24	60,282	- 61.2	835.76	49,581	- 47.4
Dec. 31	576.70	36,921	- 41.4	573.55	59,288	- 49.6	833.25	47,929	- 82.5
CAL YR 1981	-	-	+ 53.3	-	-	+137	-	-	+134
Jan. 31	577.86	37,933	+ 50.5	577.45	65,153	+293	833.96	48,394	+ 23.2
Feb. 28	586.02	45,454	+416	576.90	64,305	- 46.9	827.55	44,278	-227
Mar. 31	584.50	43,974	- 73.9	582.50	73,120	+440	838.09	51,139	+342
Apr. 30	590.49	49,937	+308	587.64	81,584	+437	837.76	50,917	- 11.4
May 31	590.31	49,746	- 9.53	584.80	76,832	-237	839.47	52,074	+ 57.7
June 30	590.80	50,265	+ 26.8	586.87	80,292	+178	837.06	50,447	- 83.9
July 31	590.24	49,672	- 29.6	583.75	75,137	-257	836.07	49,787	- 32.9
Aug. 31	583.62	43,158	-325	580.63	70,102	-251	827.54	44,272	-275
Sept. 30	579.48	39,346	-197	577.16	64,706	-278	812.97	35,568	-449
WTR YR 1982	-	-	+ 2.33	-	-	+ 2.16	-	-	- 63.7

‡ Elevation at 2400 hours by interpolation.

‡‡ Elevation at 0900 hours on first day of following month.

DIVERSIONS IN HUDSON RIVER BASIN

Undetermined diversion at Solsville from Chenango River in Susquehanna River basin into Oriskany Creek in Mohawk River Basin through Oriskany Creek Feeder.

Undetermined diversion from (and occasionally into) Oswego River, tributary to Lake Ontario, through Summit level of Erie (Barge) Canal.

Undetermined diversion from Black River tributary into Lake Ontario through Black River canal into Mohawk River in Hudson River basin.

Undetermined diversion from Hudson River basin to summit level of Champlain (Barge) Canal.

01343899 Diversion from Hinckley Reservoir (see preceding pages) for municipal supply of Utica. Diversion began prior to 1921. Records furnished by Utica Board of Water Supply.

Diversion from Schoharie Reservoir (see preceding pages) on Schoharie Creek through Shandaken Tunnel to Esopus Creek at, 01362230 Lat 42°06'52", long 74°21'51", near Phoenicia, Ulster County. No diversion prior to 1924. Records furnished by Department of Environmental Protection, City of New York.

01359498 Diversion from Watervliet Reservoir from municipal supply of city of Watervliet and town of Guilderland (see station 01359519).

01363401 Diversion from Ashokan Reservoir (see preceding pages) on Esopus Creek through the Catskill Aqueduct for municipal supply of New York City. Completed in 1917. Records furnished by Department of Environmental Protection, City of New York.

01366399 Diversion from Rondout Reservoir. Total diversion from Rondout Reservoir to Delaware Aqueduct for municipal supply of City of New York. Rondout Reservoir is a collection basin for diversion from: Cannonsville Reservoir, Pepacton Reservoir, and Neversink Reservoir in the Delaware River basin and the Rondout Creek in the Hudson River basin. Diversion began April 1944 by means of temporary emergency connection to aqueduct. Records furnished by Bureau of Water Resources Development, City of New York.

01367630 Diversion from Morris Lake, tributary to Wallkill River, by Newtown Water and Sewer Authority for municipal use in New Jersey. After use the water is released into the Paulins Kill (Delaware River basin). Records available from the Delaware River Basin Commission.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Month	01343899 Hinckley Reservoir	01362230 Schoharie Reservoir	01363401 Ashokan Reservoir	01366399 Rondout Reservoir
October.......	32.1	136	791	1,280
November......	30.2	472	924	1,100
December......	31.0	458	935	964
CAL YR 1981	32.7	423	822	1,030
January.......	31.5	673	967	848
February......	34.5	246	975	947
March.........	34.5	430	1,020	889
April.........	34.0	217	840	1,170
May...........	33.3	168	828	1,200
June..........	34.0	154	860	1,000
July..........	34.3	314	945	1,320
August........	34.0	280	970	1,360
September.....	34.1	282	902	1,330
WTR YR 1982	33.1	320	913	1,120

HACKENSACK RIVER BASIN

01376800 HACKENSACK RIVER AT WEST NYACK, NY

LOCATION.--Lat 41°05'44", long 73°57'52", Rockland County, Hydrologic Unit 02030103, on right bank 20 ft (6 m) downstream from Penn Central Transportation Co. railroad bridge at West Nyack, 1,000 ft (305 m) upstream from State Highway 59, and 1.0 mi (1.6 km) downstream from DeForest Lake.

DRAINAGE AREA.--29.4 mi^2 (76.1 km^2).

PERIOD OF RECORD.--December 1958 to current year.

GAGE.--Water-stage recorder and stop-log control. Datum of gage is 53.50 ft (16.307 m) National Geodetic Vertical Datum of 1929 (levels by Hackensack Water Co.).

REMARKS.--Records fair. Flow regulated by DeForest Lake (see Reservoirs in Hackensack River Basin). Diversion from gaging station pool for municipal supply for village of Nyack (see Diversions in Hackensack River Basin). Discharge given for this station represents the flow of Hackensack River downstream from this diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s (43.9 m^3/s) Feb. 3, 1973, gage height, 9.38 ft (2.859 m), from floodmarks, from rating curve extended above 840 ft^3/s (23.8 m^3/s); minimum daily, 2.6 ft^3/s (0.074 m^3/s) June 12, 1965, Sept. 25, 26, 30, 1966; minimum gage height, 1.70 ft (0.518 m) Oct. 22, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 264 ft^3/s (7.48 m^3/s) Apr. 28, gage height, 5.26 ft (1.603 m); minimum discharge, 4.2 ft^3/s (0.119 m^3/s) Jan. 2, Sept. 23; minimum gage height, 2.53 ft (0.771 m) Jan. 2; minimum daily, 6.5 ft^3/s (0.184 m^3/s) Nov. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	8.8	12	19	34	22	31	55	69	66	31	14
2	17	8.8	36	9.4	12	21	28	49	69	44	17	17
3	13	8.3	8.6	10	66	21	44	44	53	33	16	16
4	12	8.0	8.5	97	27	20	209	40	42	32	13	12
5	12	8.4	8.8	27	15	24	107	34	44	23	12	12
6	12	12	9.9	14	12	25	102	30	173	16	13	12
7	13	9.4	9.7	12	12	43	80	28	202	13	11	12
8	13	7.9	12	12	15	77	58	25	91	11	12	12
9	13	8.4	11	12	15	64	53	26	62	10	18	11
10	13	7.9	9.8	12	13	54	56	34	49	9.1	12	11
11	12	7.9	10	12	12	49	58	18	39	9.2	11	11
12	12	7.9	10	11	13	53	56	12	31	46	13	11
13	12	7.4	11	11	15	57	52	16	48	57	11	12
14	11	7.4	11	11	14	55	50	16	197	42	12	12
15	11	7.9	18	11	16	48	42	12	89	30	12	11
16	11	8.4	23	11	23	44	37	9.6	65	22	12	12
17	11	8.4	9.8	12	33	47	35	13	144	16	13	11
18	12	7.9	11	12	32	48	68	12	87	12	12	12
19	17	7.9	14	11	37	43	59	10	58	14	11	12
20	11	9.9	13	11	48	42	50	12	46	24	11	13
21	10	6.5	13	11	48	38	46	12	33	25	12	12
22	9.2	7.4	13	11	48	46	41	12	27	13	11	12
23	14	8.4	16	12	41	46	32	13	25	13	14	16
24	15	8.4	12	13	39	37	27	14	21	13	14	11
25	9.3	7.9	9.1	14	35	30	25	12	15	11	23	12
26	13	8.4	11	12	28	32	45	11	14	12	12	12
27	11	8.4	13	12	26	33	156	11	15	11	14	13
28	11	8.4	11	11	24	30	173	11	12	15	13	9.9
29	9.9	8.4	10	12	---	22	82	89	50	12	13	9.9
30	8.6	8.9	9.9	12	---	17	65	97	115	11	13	9.9
31	8.4	---	9.7	14	---	24	---	80	---	15	13	---
TOTAL	371.4	250.0	384.8	471.4	753	1212	1967	857.6	1985	680.3	425	363.7
MEAN	12.0	8.33	12.4	15.2	26.9	39.1	65.6	27.7	66.2	21.9	13.7	12.1
MAX	17	12	36	97	66	77	209	97	202	66	31	17
MIN	8.4	6.5	8.5	9.4	12	17	25	9.6	12	9.1	11	9.9

CAL YR 1981 TOTAL 4287.6 MEAN 11.7 MAX 86 MIN 5.7
WTR YR 1982 TOTAL 9721.2 MEAN 26.6 MAX 209 MIN 6.5

01377000 HACKENSACK RIVER AT RIVERVALE, NJ

LOCATION.--Lat 40°59'55", long 73°59'27", Bergen County, Hydrologic Unit 02030103, on upstream right bank at bridge on Westwood Avenue in Rivervale, 1.5 mi (2.4 km) upstream from Pascack Brook, 4.6 mi (7.4 km) upstream from Oradell Dam, and 27.2 mi (43.8 km) upstream from mouth.

DRAINAGE AREA.--58.0 mi^2 (150.2 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD-NJ-80-1: 1968-79(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 22.51 ft (6.861 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Water-discharge records good. Flow regulated by De Forest Lake and Lake Tappan (see Hackensack River Basin, reservoirs in). Diversions from De Forest Lake and West Nyack, NY, for municipal water supply (see Hackensack River Basin, diversions).

COOPERATION.--Gage-height record collected in cooperation with Hackensack Water Co.

AVERAGE DISCHARGE.--41 years, 88.4 ft^3/s (2.503 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,160 ft^3/s (61.2 m^3/s) Sept. 27, 1975, gage height, 7.15 ft (2.179 m); no flow part of Jan. 16, 1970 and May 30, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 716 ft^3/s (20.3 m^3/s) June 17, gage height, 3.59 ft (1.094 m); minimum daily, 12 ft^3/s (0.34 m^3/s) Jan. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	24	96	31	67	23	60	104	134	146	30	97
2	73	24	55	25	26	24	54	88	121	96	28	82
3	36	24	36	21	126	24	82	78	99	81	27	64
4	36	24	34	154	49	24	356	69	83	73	26	56
5	35	24	33	41	29	25	236	63	76	57	26	64
6	35	29	33	23	25	25	187	55	165	44	36	73
7	53	25	33	21	23	41	147	51	337	36	48	93
8	87	24	34	19	22	37	113	48	207	34	47	139
9	98	24	35	18	23	27	103	46	120	31	68	136
10	97	25	31	17	23	26	101	49	94	27	32	129
11	96	35	34	17	21	27	103	40	78	25	31	121
12	94	49	33	16	21	31	99	34	65	36	32	121
13	88	54	33	16	21	30	91	43	87	56	43	121
14	82	62	36	17	21	30	86	42	230	61	77	121
15	79	62	73	16	21	28	74	35	221	53	77	121
16	57	62	64	15	23	27	68	31	140	49	76	121
17	31	58	27	15	23	34	64	27	472	61	85	121
18	25	45	24	14	21	31	119	27	222	57	97	119
19	34	20	23	14	24	26	106	27	125	55	115	116
20	24	23	21	13	26	29	92	24	98	69	139	108
21	24	23	19	13	24	62	85	23	78	39	139	67
22	31	20	18	12	23	47	76	23	65	43	139	57
23	35	20	24	15	22	34	65	33	60	54	136	68
24	41	56	22	23	22	42	55	35	51	53	102	47
25	27	64	20	18	22	46	49	32	43	52	79	45
26	40	64	19	16	21	53	77	30	38	52	38	45
27	39	62	21	16	21	54	224	28	37	51	37	48
28	34	62	23	15	21	47	364	27	35	59	62	45
29	28	67	20	14	---	41	192	108	99	30	74	70
30	26	69	20	16	---	38	130	139	276	29	77	104
31	25	---	19	19	---	43	---	155	---	28	95	---
TOTAL	1589	1224	1013	700	811	1076	3658	1614	3956	1637	2118	2719
MEAN	51.3	40.8	32.7	22.6	29.0	34.7	122	52.1	132	52.8	68.3	90.6
MAX	98	69	96	154	126	62	364	155	472	146	139	139
MIN	24	20	18	12	21	23	49	23	35	25	26	45

CAL YR 1981 TOTAL 12484.7 MEAN 34.2 MAX 133 MIN 9.5
WTR YR 1982 TOTAL 22115.0 MEAN 60.6 MAX 472 MIN 12

RESERVOIRS IN HACKENSACK RIVER BASIN, NJ

01376700 DE FOREST LAKE.--Lat 41°06'23", long 73°58'01, Rockland County, NY, Hydrologic Unit 02030103, at dam on Hackensack River, 0.85 mi (1.37 km) north of West Nyack, NY. DRAINAGE AREA, 27.5 mi² (71.2 km²) revised. PERIOD OF RECORD, February 1956 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam with sheet piling cutoff and concrete spillway; dam completed and storage began in February 1956. Total capacity at crest of dam 4,068,000,000 gal (15.40 hm³), elevation, 80.00 ft (24.384 m). Crest of dam topped by two 50-foot (15.24 m) Bascule gates 5 ft (1.5 m) high. Flow regulated by 12-inch (0.3 m) Howell-Bunger valve at elevation, 59.25 ft (18.059 m) and 24-inch Howell-Bunger valve at elevation, 61.25 ft (18.669 m). Reservoir used for storage and water released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01376950 LAKE TAPPAN.--Lat 41°01'05", long 74°00'05", Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River, 0.50 mi (0.80 km) north of Old Tappan. DRAINAGE AREA, about 49.0 mi² (127 km²). PERIOD OF RECORD, October 1966 to current year. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed in 1966. Capacity at spillway level, 3,378,000,000 gal (12.79 hm³), elevation, 55.00 ft (16.764 m). Flow regulated by four Bascule gates and one sluice gate. Water is released by Hackensack Water Co., for municipal water supply. Record of elevation and contents furnished by Hackensack Water Co.

01377450 WOODCLIFF LAKE.--Lat 41°01', long 74°03', Bergen County, Hydrologic Unit 02030103, at dam on Pascack Brook, 0.75 mi (1.21 km) north of Hillsdale. DRAINAGE AREA, 19.4 mi² (50.2 km²). PERIOD OF RECORD, December 1929 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by earthfill dam, completed about 1905. Capacity at spillway level, 835,000,000 gal (3.160 hm³), elevation, 94.33 ft (28.752 m). Flow is regulated by flashboards and one 36-inch (0.9 m) gate in center of dam. Water is released for diversion at New Milford by Hackensack Water Co., for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

01378480 ORADELL RESERVOIR.--Lat 40°57', long 74°02', Bergen County, Hydrologic Unit 02030103, at dam on Hackensack River at Oradell. DRAINAGE AREA, 113 mi² (293 km²). PERIOD OF RECORD, December 1922 to current year. Monthend contents only, prior to September 1953, published in WSP 1302, 1722. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

Reservoir is formed by hollow concrete dam, completed in 1922. Capacity at spillway level, 2,850,000,000 gal (10.79 hm³), elevation, 22.66 ft (6.907 m). Flow regulated by seven sluice gates (7 by 9 ft or 2.1 by 2.7 m). Water is released for diversion by Hackensack Water Co., 1 mi (2 km) downstream from dam for municipal supply. Record of elevation and contents furnished by Hackensack Water Co.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft³/s)
	01376700	DE FOREST LAKE †		01376950	LAKE TAPPAN †		01377450	WOODCLIFF LAKE †	
Sept. 30	77.75	3,432	-	46.64	1,306	-	82.95	261	-
Oct. 31	77.76	3,435	+0.2	44.72	875	-21.5	84.61	318	+2.8
Nov. 30	77.46	3,350	-4.4	42.23	424	-23.2	74.15	51	-13.8
Dec. 31	79.31	3,873	+26.1	44.82	896	+23.6	85.52	352	+15.0
CAL YR 1981	-	-	+10.0	-	-	+2.6	-	-	-.8
Jan. 31	82.44	4,857	+49.1	48.88	1,886	+49.4	88.30	467	+5.7
Feb. 28	85.12	5,710	+47.1	52.90	3,122	+68.3	91.86	637	+9.4
Mar. 31	85.12	5,710	0	55.16	3,911	+39.4	88.15	460	-8.8
Apr. 30	85.27	5,760	+2.6	55.30	3,961	+2.6	92.03	646	+9.6
May 31	85.31	5,772	+.6	55.39	3,993	+1.6	92.25	657	+.5
June 30	85.33	5,779	+.4	55.41	4,000	+.4	92.03	645	-.6
July 31	84.86	5,628	-7.5	54.80	3,781	-10.9	89.05	500	-7.2
Aug. 31	84.53	5,517	-5.5	52.45	2,971	-40.4	85.87	365	-6.7
Sept. 30	84.08	5,372	-7.5	48.19	1,699	-65.6	82.27	238	-6.5
WTR YR 1982	-	-	+8.2	-	-	+1.7	-	-	-.1
	01378480	ORADELL RESERVOIR †							
Sept. 30	18.08	2,127	-						
Oct. 31	18.63	2,242	+5.7						
Nov. 30	18.19	2,150	-4.7						
Dec. 31	19.88	2,508	+17.9						
CAL YR 1981	-	-	+5.2						
Jan. 31	20.10	2,555	+2.4						
Feb. 28	21.52	2,868	+17.3						
Mar. 31	21.24	2,805	-3.1						
Apr. 30	23.43	3,581	+40.0						
May 31	23.32	3,550	-1.5						
June 30	23.26	3,534	-.8						
July 31	20.26	2,763	-38.5						
Aug. 31	18.63	2,380	-19.1						
Sept. 30	18.50	2,350	-1.5						
WTR YR 1982	-	-	+1.0						

† Elevation at 0800 on first day of following month.

DIVERSIONS FROM HACKENSACK RIVER BASIN, NJ

01376272 Hackensack Water Co., diverts water from Sparkill Creek at foot of Danny Lane in Northvale, 300 ft (91 m) south of New York-New Jersey state line and 0.6 mi (0.97 km) upstream of Sparkill Brook. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records furnished by Hackensack Water Co.

01376699 Spring Valley Water Co., diverts water at De Forest Lake for municipal supply in Rockland County, NY. Records furnished by Spring Valley Water Co.

01376810 Village of Nyack, NY, diverts water from Hackensack River 100 ft (30 m) downstream from gaging station on Hackensack River at West Nyack, NY (sta 01376800) for municipal supply. Records furnished by Board of Water Commissioners of Nyack, NY.

01378490 Hackensack Water Co., diverts water for municipal supply from Oradell Reservoir at Haworth pumping station 2.0 mi (3.2 km) upstream from gaging station on Hackensack River at New Milford and from Hackensack River about 50 ft (15 m) above gaging station on Hackensack River at New Milford, NJ (sta 01378500).

01378520 Hackensack Water Co., diverts water from Hirshfeld Brook, a tributary of the Hackensack River, below the gaging station on Hackensack River at New Milford, NJ, for municipal supply. Records furnished by Hackensack Water Co.

01391210 Hackensack Water Co., diverts water from Saddle River just north of bridge on State Route 4 at Arcola. Water is diverted into Oradell Reservoir on the Hackensack River, for municipal supply. Records furnished by Hackensack Water Co.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Month	01376699 SPRING VALLEY WATER CO.	01376810 WEST NYACK, NY	01378490 HACKENSACK WATER CO.
October	10.6	2.12	118
November	5.63	2.02	107
December	3.88	2.03	111
CAL YR 1981	4.92	2.07	110
January	3.94	2.09	133
February	4.11	2.10	140
March	4.33	2.05	134
April	4.69	2.31	134
May	6.06	2.51	141
June	8.92	2.42	143
July	7.49	2.65	164
August	2.46	2.46	153
September	2.24	2.24	144
WTR YR 1982	6.19	2.25	135

Tabulation of diversion by pumpage from sources other than the Hackensack River into Oradell Reservoir. These figures are included in diversions from Hackensack River as noted above.

DIVERSIONS, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Month	01376272 SPARKILL CREEK (HUDSON RIVER BASIN)	01378520 HIRSHFELD BROOK (HACKENSACK RIVER BASIN)	01391210 SADDLE RIVER (PASSAIC RIVER BASIN)	WELLS TO SURFACE SUPPLY
October	0.41	2.21	7.43	2.70
November	.18	2.25	5.53	2.61
December	2.19	3.06	11.9	2.56
CAL YR 1981.	.93	2.54	12.8	2.01
January	0	.54	2.47	.35
February	0	0	0	0
March	0	0	3.51	0
April	0	0	2.33	0
May	.28	2.28	12.2	1.47
June	.26	.65	4.99	.45
July	.09	1.45	11.0	2.15
August	.18	.87	5.30	.85
September	0	0	.23	0
WTR YR 1982.	.30	1.12	5.65	1.11

01387400 RAMAPO RIVER AT RAMAPO, N.Y.

LOCATION.--Lat 41°08'25", long 74°10'08", Rockland County, Hydrologic Unit 02030103, on right bank, 105 ft (32.0 m) downstream from highway bridge on Nev York State Thruway at Ramapo, 500 ft (152 m) upstream from local bridge, and 0.4 mi (0.64 km) upstream from Torne Brook.

DRAINAGE AREA.--86.7 mi² (225 km²).

PERIOD OF RECORD.--June 1979 to current year.

REVISED RECORDS.--WDR NY-81-1: 1980(m).

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 297.00 ft (90.526 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those during winter periods, which are fair. Occasional regulation by Lake Sebago.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft³/s (144 m³/s) Mar. 22, 1980, gage height, 9.89 ft (3.014 m); minimum, 7.6 ft³/s (0.22 m³/s) Sept. 11, 12, 1980, Sept. 8, 1981, gage height, 1.35 ft (0.411 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,050 ft³/s (29.7 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0815	*1,980	56.1	*6.47	1.972
Feb. 4	0615	1,340	37.9	5.48	1.670

Minimum discharge, 10 ft³/s (0.28 m³/s) Oct. 15, 16-17, 18, gage height, 1.40 ft (0.427 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	50	42	161	200	81	167	262	249	267	249	30
2	55	44	245	295	311	79	171	237	311	151	120	50
3	42	40	242	228	670	78	257	215	294	111	75	57
4	24	33	166	845	1250	72	689	188	234	102	60	48
5	19	30	135	1770	816	78	532	167	192	86	51	37
6	17	39	117	964	560	86	430	140	336	70	44	32
7	17	49	96	614	411	114	383	124	632	64	39	30
8	16	43	88	420	327	275	336	108	599	59	41	30
9	16	38	98	310	283	183	302	100	398	52	217	27
10	15	35	90	210	252	137	283	89	275	44	273	26
11	13	32	78	160	215	137	316	78	220	40	179	24
12	13	31	72	130	179	224	319	73	179	105	117	22
13	12	30	68	120	159	289	300	78	200	102	86	21
14	12	29	63	110	137	281	275	78	500	69	70	20
15	11	29	88	105	130	254	242	70	350	56	60	21
16	10	32	133	100	159	237	220	65	250	47	52	24
17	10	36	117	98	205	244	210	60	450	41	47	25
18	11	38	100	96	159	252	368	54	377	36	43	24
19	15	38	88	94	144	239	336	50	267	33	38	21
20	16	46	76	92	155	227	267	47	222	81	34	19
21	16	66	73	90	167	220	239	48	167	159	32	21
22	15	64	71	88	155	217	217	47	144	81	30	22
23	15	56	90	86	137	196	201	49	140	61	26	29
24	35	50	143	134	130	175	188	65	137	50	26	32
25	40	47	143	117	111	163	171	65	105	40	66	28
26	38	44	129	100	102	183	220	57	89	34	105	24
27	68	43	123	90	89	205	386	49	84	31	65	32
28	125	43	133	75	84	159	389	43	84	36	51	39
29	100	41	125	70	---	134	327	465	120	43	40	33
30	72	41	115	68	---	124	289	472	392	30	33	28
31	59	---	103	69	---	124	---	308	---	36	31	---
TOTAL	938	1237	3450	7909	7697	5467	9030	3951	7997	2217	2400	876
MEAN	30.3	41.2	111	255	275	176	301	127	267	71.5	77.4	29.2
MAX	125	66	245	1770	1250	289	689	472	632	267	273	57
MIN	10	29	42	68	84	72	167	43	84	30	26	19

CAL YR 1981 TOTAL 36928.5 MEAN 101 MAX 2110 MIN 8.0
WTR YR 1982 TOTAL 53169.0 MEAN 146 MAX 1770 MIN 10

01387420 RAMAPO RIVER AT SUFFERN, NEW YORK

LOCATION.--Lat 41°07'06", long 74°09'38", Rockland County, Hydrologic Unit 02030103, on left bank, 145 ft (44.2 m) downstream from highway bridge on New York State Thruway at Suffern, and 1.1 mi (1.77 km) upstream from Mahwah River.

DRAINAGE AREA.--93.0 mi² (241 km²).

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Concrete control. Datum of gage is 264.44 ft (80.601 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and period of questionable gage height record, Aug. 9 to Sept. 12, which are poor. Flow affected by diversion from Spring Valley Water Company well field upstream from station and by occasional regulation by Lake Sebago.

COOPERATION.--Figures of pumpage from well field furnished by Spring Valley Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 5,160 ft³/s (146 m³/s) Mar. 22, 1980 (gage height about 11.1 ft or 3.38 m) from rating curve extended above 1,800 ft³/s (51 m³/s) on basis of runoff comparison with station 1.5 mi (2.4 km) upstream, minimum 2.6 ft³/s (0.07 m³/s) Sept. 30, 1981, gage height, 1.23 ft (0.375 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft³/s (31.2 m³/s) and maximum(*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 5	0830	*2,330	66.0	*7.61	2.320	Feb. 4	0745	1,630	46.2	6.33	1.929

Minimum discharge, 4.0 ft³/s (0.11 m³/s) Oct. 1, gage height 1.28 ft (0.390 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	45	39	180	200	76	148	243	240	269	235	23
2	51	41	240	325	375	72	155	213	302	150	119	58
3	37	36	232	269	898	70	257	195	287	115	70	70
4	21	33	161	998	1510	67	784	173	235	109	50	54
5	17	26	131	2120	967	72	585	157	195	96	42	42
6	16	36	113	1170	645	85	441	137	315	75	37	34
7	15	45	93	745	453	117	386	125	693	65	31	30
8	15	40	87	533	338	275	338	109	628	57	31	27
9	14	33	96	383	278	173	302	102	369	47	240	24
10	13	29	87	220	237	131	284	89	246	41	300	20
11	12	28	79	150	195	127	322	74	168	37	210	17
12	12	26	74	130	173	188	325	65	125	115	120	15
13	11	24	67	120	168	293	299	79	188	115	86	14
14	11	23	61	110	140	290	269	79	550	74	68	13
15	11	23	87	100	150	246	224	61	423	53	54	13
16	11	27	127	98	170	216	195	51	296	45	47	18
17	10	29	111	96	190	216	188	45	441	39	41	19
18	11	30	96	94	160	249	351	40	348	35	37	18
19	17	30	85	90	140	235	322	34	263	30	32	14
20	17	39	83	86	160	218	243	30	213	74	28	14
21	15	57	85	82	170	198	208	31	173	166	26	18
22	14	55	72	75	150	200	190	33	150	85	24	20
23	15	49	91	91	130	183	173	36	159	57	21	28
24	33	44	142	137	120	171	164	57	148	46	20	30
25	34	44	144	117	110	155	152	55	119	37	45	23
26	36	40	139	96	98	164	190	44	102	30	120	19
27	61	39	135	84	88	188	372	37	91	27	74	30
28	109	39	150	78	80	152	383	30	96	30	52	36
29	85	37	139	72	---	127	318	554	137	38	39	28
30	65	37	127	65	---	123	284	476	376	28	32	21
31	55	---	113	75	---	123	---	293	---	25	26	---
TOTAL	853.0	1084	3486	8989	8493	5200	8852	3747	8076	2210	2357	790
MEAN	27.5	36.1	112	290	303	168	295	121	269	71.3	76.0	26.3
MAX	109	57	240	2120	1510	293	784	554	693	269	300	70
MIN	9.0	23	39	65	80	67	148	30	91	25	20	13
‡	0.0	6.3	7.2	7.8	9.8	14	14	14	6.9	10	8.8	8.5

CAL YR 1981 TOTAL 38885.8 MEAN 107 MAX 2370 MIN 3.7
WTR YR 1982 TOTAL 54137.0 MEAN 148 MAX 2120 MIN 9.0

‡ Diversion, in cubic feet per second, by pumpage from well field upstream of station.

PASSAIC RIVER BASIN

01387450 MAHWAH RIVER NEAR SUFFERN, NY

LOCATION.--Lat 41°08'27", long 74°07'01", Rockland County, Hydrologic Unit 02030103, on left bank 13 ft (4 m) upstream from bridge on U.S. Highway 202, 2.5 mi (4.0 km) northeast of Suffern, and 4.8 mi (7.7 km) upstream from mouth.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--August 1958 to current year.

REVISED RECORDS.--WRD NY-79-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 321.57 ft (98.015 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 18, 1976, water-stage recorder at site on right bank 13 ft (4 m) downstream, at present datum.

REMARKS.--Records fair except those during winter periods, which are poor. Occasional regulation from unknown source.

AVERAGE DISCHARGE.--24 years, 24.4 ft³/s (0.691 m³/s), 26.94 in/yr (684 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,840 ft³/s (52.1 m³/s) Nov. 8, 1977, gage height, 9.91 ft (3.021 m), from rating curve extended above 850 ft³/s (24.1 m³/s) on basis of contracted-opening measurements at gage heights 8.52 ft (2.597 m) and 9.91 ft (3.021 m); minimum 0.05 ft³/s (0.001 m³/s) Oct. 20, 21, 1970, result of temporary pumping from gage pool.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.67 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Jan. 4	1445	*411	11.6	*4.77	1.454
Feb. 3	1730	225	6.4	3.86	1.177
May 29	1100	227	6.4	3.87	1.180

Minimum discharge, 0.71 ft³/s (0.01 m³/s) Oct. 1, gage height, 1.29 ft (0.393 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.7	4.7	33	15	9.2	19	36	34	21	54	4.0
2	12	4.0	57	42	30	9.0	16	31	54	15	14	12
3	2.6	3.5	35	31	100	9.2	34	27	41	14	9.1	11
4	1.6	3.4	24	195	153	10	83	24	34	13	6.2	6.6
5	1.2	3.1	18	195	92	11	53	22	37	12	5.4	5.4
6	1.3	4.8	15	95	62	12	46	20	92	11	4.7	4.5
7	1.4	5.6	13	66	47	24	39	18	106	10	4.5	3.7
8	1.5	4.8	13	51	39	31	35	17	72	9.1	4.2	3.4
9	1.3	4.2	13	41	34	19	35	16	50	8.0	19	3.2
10	1.2	3.7	11	25	30	17	36	14	39	7.0	13	3.0
11	1.4	3.4	9.7	18	24	18	39	13	33	6.8	9.1	2.7
12	1.3	3.1	8.8	16	21	25	36	13	28	34	7.5	2.6
13	1.4	3.0	8.0	15	19	27	33	15	53	16	6.2	2.6
14	1.7	3.0	7.8	14	17	25	30	13	89	11	5.2	2.5
15	1.8	3.0	14	13	18	23	26	11	55	8.3	4.7	2.3
16	1.8	3.2	35	12	25	22	24	10	45	7.0	4.0	2.2
17	1.8	3.1	21	12	25	25	23	9.4	79	6.4	4.2	2.2
18	2.1	3.5	17	11	19	25	49	8.5	49	5.8	4.3	2.1
19	3.2	3.5	15	11	19	24	37	8.0	40	5.2	3.7	1.9
20	3.4	5.0	13	11	22	22	30	7.8	34	16	3.4	2.2
21	3.4	6.4	12	10	23	22	28	7.3	29	10	3.4	4.3
22	2.8	5.4	12	11	20	22	24	7.0	24	7.3	3.0	3.8
23	3.5	4.8	16	12	18	19	22	8.8	27	5.8	2.8	6.0
24	9.1	4.5	24	15	17	18	20	12	20	5.2	2.8	3.4
25	3.8	4.3	21	13	15	17	18	10	17	4.5	30	7.5
26	6.0	4.0	17	11	11	19	39	8.5	15	4.2	13	5.0
27	6.4	4.0	17	10	10	18	66	7.3	15	4.0	8.5	3.5
28	13	3.8	21	9.4	9.4	16	65	6.6	15	6.6	6.2	3.2
29	8.3	3.7	17	9.1	---	15	50	83	33	5.6	4.8	2.5
30	6.6	3.5	16	8.8	---	15	41	44	38	4.5	3.8	2.6
31	5.2	---	14	10	---	16	---	40	---	7.8	3.5	---
TOTAL	113.7	120.0	540.0	1026.3	934.4	584.4	1096	568.2	1297	302.1	268.2	121.9
MEAN	3.67	4.00	17.4	33.1	33.4	18.9	36.5	18.3	43.2	9.75	8.65	4.06
MAX	13	6.4	57	195	153	31	83	83	106	34	54	12
MIN	1.2	3.0	4.7	8.8	9.4	9.0	16	6.6	15	4.0	2.8	1.9
CFSM	.30	.33	1.42	2.69	2.72	1.54	2.97	1.49	3.51	.79	.70	.33
IN.	.34	.36	1.63	3.10	2.83	1.77	3.31	1.72	3.92	.91	.81	.37

CAL YR 1981 TOTAL 5717.94 MEAN 15.7 MAX 385 MIN .48 CFSM 1.28 IN 17.29
WTR YR 1982 TOTAL 6972.20 MEAN 19.1 MAX 195 MIN 1.2 CFSM 1.55 IN 21.08

01387500 RAMAPO RIVER NEAR MAHWAH, NJ

LOCATION.--Lat 41°05'51", long 74°09'48", Bergen County, Hydrologic Unit 02030103, on left bank 350 ft (107 m) downstream from State Highway 17, 0.6 mi (1.0 km) downstream from Mahwah River, and 1.0 mi (1.6 km) west of Mahwah. Water-quality samples collected at bridge 350 ft (107 m) upstream from gage at high flows.

DRAINAGE AREA.--118 mi^2 (306 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to December 1906, September 1922 to current year (October 1902 to February 1905 monthly discharge only, published in WSP 1302). Figures of daily discharge Feb. 10, 1903, to Dec. 31, 1904, published in WSP 97, 125, are unreliable and should not be used.

REVISED RECORDS.--WSP 781: 1904(M). WSP 1031: 1938, 1940. WSP 1552: 1923(M), 1924, 1925-26(M), 1927-28, 1933, 1937. WRD-NJ 1971: 1968(M).

GAGE.--Water-stage recorder. Datum of gage is 253.10 ft (77.145 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 31, 1906, nonrecording gage on former bridge at site 250 ft (76 m) downstream at different datum. Sept. 1, 1922 to Dec. 23, 1936, water-stage recorder just below former bridge at present datum.

REMARKS.--Water-discharge records fair. Occasional regulation from lakes and ponds upstream from the station.

AVERAGE DISCHARGE.--64 years (water years 1903-06,1923-82), 228 ft^3/s (6.457 m^3/s), 26.24 in/yr (666 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 12,400 ft^3/s (352 m^3/s) Oct. 9, 1903, gage height, 11.0 ft (3.35 m) from graph based on gage readings, site and datum then in use, from rating curve extended above 1,400 ft^3/s (39.6 m^3/s); maximum gage height, 12.44 ft (3.792 m) Nov. 8, 1977; minimum discharge, 4.6 ft^3/s (0.13 m^3/s) Sept. 30, 1981 (possible regulation); minimum daily discharge, 6.1 ft^3/s (0.17 m^3/s) Sept. 30, 1981 (possible regulation).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft^3/s (39.6 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Jan. 5	0700	*2520	71.4	8.40	2.560
Feb. 4	0645	1850	52.4	7.70	2.347

Minimum discharge, 5.7 ft^3/s (0.16 m^3/s) Oct. 1, gage height, 2.14 ft (0.652 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	74	67	261	458	143	210	315	308	311	333	45
2	121	67	385	409	434	142	204	283	416	219	156	72
3	65	56	351	338	1220	141	312	255	363	176	102	73
4	38	48	258	1180	1720	133	828	230	270	167	76	52
5	29	44	208	2290	1050	142	604	211	237	135	64	42
6	28	64	179	1190	687	150	480	189	453	111	54	38
7	26	73	149	705	499	199	422	173	828	94	48	36
8	25	63	137	521	399	325	367	159	716	82	49	33
9	24	54	150	406	347	229	338	149	457	69	284	32
10	21	49	136	338	311	192	322	138	317	61	331	28
11	19	45	118	311	264	191	363	124	250	43	195	26
12	18	42	105	266	236	256	357	105	214	197	131	23
13	17	41	95	227	221	321	330	105	311	161	102	23
14	16	39	89	234	203	310	305	101	687	93	83	22
15	17	37	161	215	196	283	270	88	523	80	71	22
16	16	46	258	199	222	266	247	79	392	61	61	27
17	16	48	207	189	254	281	237	72	590	53	53	29
18	26	49	173	180	217	289	429	67	429	44	51	26
19	33	47	148	166	206	273	376	63	313	41	44	23
20	32	70	125	160	219	258	310	59	263	136	38	28
21	29	90	113	149	227	251	289	61	224	223	34	34
22	25	84	114	136	214	250	256	59	198	113	30	37
23	41	73	156	151	198	229	237	68	214	79	27	50
24	79	67	244	191	189	216	228	86	186	63	28	44
25	65	62	229	166	174	205	214	80	155	51	122	37
26	81	55	199	147	161	220	295	69	139	43	120	32
27	116	56	189	136	153	231	528	60	137	41	67	55
28	198	54	207	122	147	199	524	79	131	65	53	48
29	148	52	186	116	---	180	411	654	229	64	44	40
30	108	52	180	109	---	172	350	540	425	47	39	36
31	87	---	167	138	---	177	---	357	---	48	35	---
TOTAL	1590	1701	5483	11346	10826	6854	10643	5078	10375	3171	2925	1113
MEAN	51.3	56.7	177	366	387	221	355	164	346	102	94.4	37.1
MAX	198	90	385	2290	1720	325	828	654	828	311	333	73
MIN	16	37	67	109	147	133	204	59	131	41	27	22
CFSM	.44	.48	1.50	3.10	3.28	1.87	3.01	1.39	2.93	.86	.80	.31
IN.	.50	.54	1.73	3.58	3.41	2.16	3.36	1.60	3.27	1.00	.92	.35

CAL YR 1981 TOTAL 50747.0 MEAN 139 MAX 2620 MIN 6.1 CFSM 1.18 IN 16.00
WTR YR 1982 TOTAL 71105.0 MEAN 195 MAX 2290 MIN 16 CFSM 1.65 IN 22.42

(NOTE. WATER-QUALITY DATA FOR THIS STATION ARE NOT PUBLISHED IN THIS REPORT: THEY ARE PUBLISHED IN THE SERIES "WATER RESOURCES DATA FOR NEW JERSEY.")

DELAWARE RIVER BASIN

01413500 EAST BRANCH DELAWARE RIVER AT MARGARETVILLE, NY

LOCATION.--Lat 42°08'41", long 74°39'14", Delaware County, Hydrologic Unit 02040102, on right bank at downstream side of bridge on Fair Street at intersection with Main Street at Margaretville, 0.2 mi (0.3 km) upstream from unnamed tributary, and 1.6 mi (2.6 km) downstream from Dry Brook.

DRAINAGE AREA.--163 mi² (422 km²).

PERIOD OF RECORD.--February 1937 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,302.38 ft (396.965 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1937, nonrecording gage and Sept. 9, 1937 to Aug. 17, 1944, water-stage recorder, at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair.

AVERAGE DISCHARGE.--45 years, 306 ft³/s (8.666 m³/s), 25.49 in/yr (647 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft³/s (445 m³/s) Nov. 25, 1950, gage height, 13.84 ft (4.218 m), from rating curve extended above 8,700 ft³/s (246 m³/s); minimum, 5.0 ft³/s (0.14 m³/s) Aug. 5, 1964; minimum gage height, 0.89 ft (0.271 m) Sept. 30, Oct. 1, 1943, present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,800 ft³/s (79 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 4	0415	3,270	92.6	7.48	2.28
Apr. 18	0345	*3,570	101	*7.77	2.37

Minimum discharge, 14 ft³/s (0.40 m³/s) Sept. 12, 13-14, 15; minimum gage height, 2.54 ft (0.774 m), Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	474	164	150	400	86	1170	308	103	636	74	36
2	295	410	261	150	440	82	990	282	197	480	67	33
3	223	354	249	155	1500	80	1250	261	148	385	60	36
4	202	310	220	450	2200	76	1800	240	135	327	54	29
5	183	277	214	900	1000	140	1200	217	144	266	52	26
6	181	377	204	500	700	140	988	201	448	223	46	24
7	231	378	193	400	560	130	765	188	771	192	43	25
8	258	313	201	350	450	110	664	173	613	174	41	19
9	235	303	193	270	370	96	554	170	477	151	45	18
10	208	276	174	250	310	110	491	168	369	132	43	17
11	191	264	166	230	280	190	455	145	315	118	38	16
12	177	250	160	220	270	640	418	138	275	156	35	14
13	163	233	149	210	260	720	419	141	275	121	32	14
14	150	223	141	200	250	761	493	123	287	141	32	14
15	140	222	144	190	260	615	431	113	223	198	30	18
16	133	216	144	180	270	553	436	106	211	138	29	29
17	124	206	135	180	220	581	730	101	310	118	29	23
18	119	202	132	175	200	617	2350	94	237	105	39	19
19	141	192	105	170	190	637	1330	90	192	97	30	17
20	122	245	100	150	170	568	1060	91	181	132	28	16
21	109	268	100	140	160	610	960	86	165	118	26	16
22	102	231	100	130	150	619	780	82	150	93	24	16
23	138	213	250	130	140	571	632	125	203	81	23	19
24	291	206	270	130	120	558	528	137	153	72	21	24
25	200	195	220	120	110	613	471	113	129	67	23	20
26	230	187	210	120	100	1020	489	94	116	60	28	18
27	549	210	200	110	96	894	579	83	116	56	24	29
28	1400	200	190	100	90	692	460	79	364	110	23	36
29	982	184	180	98	---	611	381	99	705	138	19	28
30	723	170	160	98	---	573	338	102	968	83	18	24
31	568	---	155	100	---	735	---	101	---	67	19	---
TOTAL	8900	7789	5484	6756	11266	14428	23612	4451	8980	5235	1095	673
MEAN	287	260	177	218	402	465	787	144	299	169	35.3	22.4
MAX	1400	474	270	900	2200	1020	2350	308	968	636	74	36
MIN	102	170	100	98	90	76	338	79	103	56	18	14
CFSM	1.76	1.59	1.08	1.33	2.46	2.85	4.82	.88	1.83	1.03	.22	.14
IN.	2.03	1.77	1.25	1.54	2.56	3.28	5.38	1.01	2.04	1.19	.25	.15

CAL YR 1981 TOTAL 100777 MEAN 276 MAX 3260 MIN 24 CFSM 1.69 IN 22.94
WTR YR 1982 TOTAL 98669 MEAN 270 MAX 2350 MIN 14 CFSM 1.65 IN 22.46

01414500 MILL BROOK NEAR DUNRAVEN, NY

LOCATION.--Lat 42°06'22", long 74°43'51", Delaware County, Hydrologic Unit 02040102, on left bank 0.4 mi (0.6 km) upstream from bridge on New York City Road 9 and Pepacton Reservoir, and 2.7 mi (4.3 km) southwest of Dunraven.

DRAINAGE AREA.--25.2 mi² (65.3 km²), revised.

PERIOD OF RECORD.--February 1937 to current year. Published as "at Arena" 1937-67.

REVISED RECORDS.--WSP 1432: 1937.

GAGE.--Water-stage recorder. Datum of gage is 1,298.54 ft (395.795 m) Board of Water Supply, City of New York datum. Prior to Oct. 17, 1939, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum. Oct. 17 to Dec. 8, 1939, nonrecording gage at present site at different datum.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--45 years, 55.9 ft³/s (1.583 m³/s), 30.36 in/yr (771 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,500 ft³/s (127 m³/s) Sept. 21, 1938, from rating curve extended above 960 ft³/s (27.2 m³/s) on basis of velocity-area study; maximum gage height, 9.92 ft (3.024 m) Nov. 25, 1950; minimum discharge observed, 1.2 ft³/s (0.034 m³/s) Sept. 25, 26, 1939, gage height, 0.71 ft (0.216 m), site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 740 ft³/s (21 m³/s):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 18	0115	1,540	43.6	6.23	1.900

Minimum discharge, 3.3 ft³/s (0.09 m³/s) Sept. 8, 9, gage height, 2.83 ft (0.863 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	79	29	25	25	13	215	65	19	74	11	3.4
2	68	68	47	25	50	12	156	60	39	57	9.3	3.6
3	56	59	44	27	200	11	273	55	30	51	9.0	3.8
4	53	54	41	100	302	11	319	51	30	44	7.4	3.4
5	49	49	40	127	151	11	199	46	30	38	6.6	3.4
6	47	63	38	92	113	15	156	42	47	33	6.1	3.4
7	51	59	35	76	83	24	118	39	67	30	5.6	3.4
8	56	53	35	56	72	21	106	36	58	27	5.4	3.3
9	54	52	34	50	65	22	92	34	54	26	6.1	3.4
10	50	49	30	40	56	24	81	32	49	24	5.6	3.8
11	47	48	29	37	50	45	73	29	46	21	5.2	3.8
12	43	46	28	35	45	73	67	29	42	34	4.7	3.6
13	40	43	27	34	43	100	68	29	42	24	4.5	3.6
14	37	41	25	33	41	102	76	26	42	21	4.5	3.6
15	35	40	25	32	40	83	72	25	36	19	4.3	3.8
16	33	40	25	31	38	76	79	23	36	16	4.3	4.5
17	31	39	24	30	33	77	215	22	46	15	4.5	4.0
18	31	37	22	30	30	73	575	21	37	13	4.3	4.0
19	35	36	22	29	29	74	226	20	33	12	4.1	4.0
20	31	44	22	28	27	72	191	21	32	15	4.0	3.8
21	28	47	25	26	26	83	170	19	29	13	4.1	3.8
22	26	43	40	25	25	83	152	18	28	10	4.0	3.8
23	42	41	60	24	24	76	119	23	34	9.3	3.8	4.3
24	62	40	44	23	23	76	101	23	27	8.7	3.8	3.8
25	52	37	37	21	21	90	95	21	25	7.7	4.0	4.0
26	55	35	35	20	18	164	111	18	24	7.2	3.8	4.0
27	104	36	33	18	16	139	134	16	23	7.2	3.8	4.1
28	254	35	31	17	14	109	103	16	22	14	3.6	3.4
29	154	33	29	16	---	96	85	21	95	10	3.4	3.8
30	115	30	27	15	---	83	74	23	113	7.7	3.4	4.0
31	92	---	25	16	---	127	---	20	---	10	3.4	---
TOTAL	1874	1376	1008	1158	1660	2065	4501	923	1235	698.8	157.6	112.6
MEAN	60.5	45.9	32.5	37.4	59.3	66.6	150	29.8	41.2	22.5	5.08	3.75
MAX	254	79	60	127	302	164	575	65	113	74	11	4.5
MIN	26	30	22	15	14	11	67	16	19	7.2	3.4	3.3
CFSM	2.40	1.82	1.29	1.48	2.35	2.64	5.95	1.18	1.64	.89	.20	.15
IN.	2.77	2.03	1.49	1.71	2.45	3.05	6.64	1.36	1.82	1.03	.23	.17

CAL YR 1981 TOTAL 19692.9 MEAN 54.0 MAX 1330 MIN 4.5 CFSM 2.14 IN 29.07
WTR YR 1982 TOTAL 16769.0 MEAN 45.9 MAX 575 MIN 3.3 CFSM 1.82 IN 24.75

01415000 TREMPER KILL NEAR ANDES, NY

LOCATION.--Lat 42°07'12", long 74°49'08", Delaware County, Hydrologic Unit 02040102, on right bank 500 ft (152 m) upstream from bridge on County Highway 1, about 1,700 ft (518 m) upstream from Pepacton Reservoir, and 5 mi (8 km) south of Andes.

DRAINAGE AREA.--33.2 mi^2 (86.0 km^2), revised.

PERIOD OF RECORD.--February 1937 to current year. Published as "near Shavertown" 1937-67.

GAGE.--Water-stage recorder. Concrete control since Nov. 1937. Datum of gage is 1,265.87 ft (391.933 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 5, 1937, nonrecording gage at site 500 ft (152 m) downstream at different datum. Aug. 5 to Sept. 28, 1937, nonrecording gage at site 0.25 mi (0.40 km) downstream at different datum.

REMARKS.--Records fair except those for winter periods and periods of questionable gage height record, Oct. 28 to Nov. 10, Mar. 12 to May 25, and June 6-15, which are poor.

AVERAGE DISCHARGE.--45 years, 59.8 ft^3/s (1.694 m^3/s), 24.46 in/yr (621 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,250 ft^3/s (120 m^3/s) Sept. 21, 1938, gage height, 7.12 ft (2.170 m), from rating curve extended above 1,500 ft^3/s (42.5 m^3/s); minimum, 0.5 ft^3/s (0.014 m^3/s) Sept. 17, 21, 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	Unknown	a800	23.0	Unknown		Apr. 18	Unknown	a*1,000	28.0	Unknown	

a About.

Minimum discharge, 2.7 ft^3/s (0.076 m^3/s) Sept. 14, 15, gage height 2.36 ft (0.719 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	100	40	50	110	25	260	68	59	133	13	13
2	90	88	60	52	100	19	170	62	106	99	14	8.1
3	76	76	55	56	190	15	220	57	78	80	20	10
4	74	66	50	130	400	13	400	54	75	67	13	6.8
5	67	64	50	160	210	29	320	49	65	53	10	5.6
6	72	90	47	100	110	22	250	45	88	43	8.2	4.5
7	90	82	46	82	74	20	190	42	160	37	7.4	3.8
8	101	80	49	70	60	19	150	40	110	35	7.5	4.7
9	92	74	46	60	50	20	120	38	70	30	10	4.4
10	82	70	43	50	43	22	10C	35	56	26	8.3	4.2
11	74	66	41	45	38	35	88	32	45	24	6.8	3.8
12	65	63	39	42	35	150	80	29	44	29	6.1	3.6
13	58	60	36	38	33	110	86	32	45	22	5.4	3.1
14	52	58	35	36	30	100	92	29	50	19	5.1	2.8
15	47	56	31	34	28	94	84	26	43	17	4.8	3.4
16	43	54	27	31	28	90	90	24	39	15	4.4	6.4
17	40	52	27	29	27	105	250	23	56	14	6.8	4.7
18	41	51	27	27	26	100	650	22	40	13	6.9	3.8
19	49	50	27	26	25	96	450	21	35	13	5.0	3.4
20	40	65	28	25	24	94	300	23	34	28	4.9	3.4
21	36	65	30	24	23	100	230	21	31	19	6.4	3.6
22	34	58	33	23	23	110	220	19	30	13	5.7	3.6
23	58	55	100	23	22	94	150	25	53	11	5.5	5.5
24	82	53	90	22	22	86	130	29	34	9.8	4.7	5.5
25	65	50	76	22	21	130	120	23	29	8.9	7.5	4.2
26	84	49	70	21	24	230	130	17	27	8.1	8.0	3.4
27	174	52	62	20	26	190	140	15	29	7.3	6.0	5.8
28	450	49	60	20	32	150	110	15	64	18	4.6	5.8
29	200	44	56	19	---	120	88	69	203	15	4.0	4.7
30	150	41	50	18	---	110	74	58	190	10	4.1	3.9
31	120	---	50	35	---	150	---	64	---	12	3.6	---
TOTAL	2764	1881	1481	1390	1834	2648	5742	1106	1988	929.1	227.7	149.5
MEAN	89.2	62.7	47.8	44.8	65.5	85.4	191	35.7	66.3	30.0	7.35	4.98
MAX	450	100	100	160	400	230	650	69	203	133	20	13
MIN	34	41	27	18	21	13	74	15	27	7.3	3.6	2.8
CFSM	2.69	1.89	1.44	1.35	1.97	2.57	5.75	1.08	2.00	.90	.22	.15
IN.	3.10	2.11	1.66	1.56	2.05	2.97	6.43	1.24	2.23	1.04	.26	.17

CAL YR 1981 TOTAL 19830.4 MEAN 54.3 MAX 900 MIN 3.3 CFSM 1.64 IN 22.22
WTR YR 1982 TOTAL 22140.3 MEAN 60.7 MAX 650 MIN 2.8 CFSM 1.83 IN 24.81

01417000 EAST BRANCH DELAWARE RIVER AT DOWNSVILLE, NY

LOCATION.--Lat 42°04'30", long 74°58'36", Delaware County, Hydrologic Unit 02040102, on left bank 0.5 mi (0.8 km) downstream from Downsville Dam, at downstream end of outlet channel of Pepacton Reservoir, and 1.0 mi (1.6 km) east of Downsville.

DRAINAGE AREA.--372 mi^2 (963 km^2), revised.

PERIOD OF RECORD.--July 1941 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,094.92 ft (333.731 m) Board of Water Supply, City of New York datum. Prior to Sept. 26, 1941, nonrecording gage, and Sept. 26, 1941, to June 27, 1955, water-stage recorder, at site 0.8 mi (1.3 km) downstream at datum 7.03 ft (2.143 m) lower.

REMARKS.--Records good. Subsequent to September 1954, entire flow from drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,900 ft^3/s (677 m^3/s) Nov. 26, 1950, gage height, 14.52 ft (4.426 m), site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s), minimum, 0.3 ft^3/s (0.008 m^3/s) Oct. 11, 1954; minimum daily, 0.6 ft^3/s (0.017 m^3/s) Oct. 10, 1954; minimum gage height, 1.39 ft (0.424 m) Jan. 17, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of about 16 ft or 5 m (at former datum).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft^3/s (30.9 m^3/s) Apr. 24, 25, gage height, 4.15 ft (1.265 m); minimum daily, 50 ft^3/s (1.42 m^3/s) Feb. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	53	56	55	53	55	68	576	72	71	67	104
2	74	53	56	55	53	53	67	596	72	71	66	103
3	68	53	56	56	54	54	69	574	73	72	68	103
4	75	53	54	54	54	57	69	545	74	71	68	103
5	78	53	54	57	54	53	69	507	67	71	82	103
6	70	54	54	54	54	58	68	455	69	71	104	103
7	72	54	54	54	54	58	70	301	72	82	99	102
8	74	53	54	55	54	54	66	141	74	101	98	103
9	74	54	55	53	54	55	64	82	74	83	88	102
10	74	53	53	56	54	56	66	74	74	64	70	103
11	74	53	55	52	54	54	67	73	75	69	70	102
12	74	55	55	55	54	59	70	73	75	71	70	102
13	74	55	55	54	54	54	72	74	75	70	68	102
14	74	55	57	54	55	56	72	74	77	83	66	102
15	74	55	57	55	55	57	64	74	72	101	66	102
16	74	55	55	53	55	57	62	70	72	100	68	102
17	74	56	54	52	51	56	64	69	71	100	66	102
18	74	55	53	55	54	52	66	71	70	100	68	102
19	74	55	53	54	54	57	66	75	71	100	84	102
20	74	56	56	53	55	60	68	67	70	84	99	102
21	74	55	54	52	57	56	70	75	70	68	85	102
22	74	55	53	51	58	58	282	69	70	68	66	102
23	74	55	55	51	57	58	853	70	71	69	82	102
24	74	56	54	51	55	55	1060	70	70	68	104	102
25	74	55	54	51	53	54	1050	70	70	69	97	102
26	74	55	54	51	50	55	850	69	70	82	104	102
27	74	55	55	52	54	53	763	71	70	85	104	109
28	74	55	55	52	53	56	628	72	70	66	103	104
29	65	55	55	52	---	65	450	71	72	66	104	98
30	52	55	55	52	---	69	481	70	71	66	104	97
31	53	---	55	52	---	67	---	71	---	66	104	---
TOTAL	2229	1634	1695	1653	1516	1761	7834	5349	2153	2408	2592	3069
MEAN	71.9	54.5	54.7	53.3	54.1	56.8	261	173	71.8	77.7	83.6	102
MAX	78	56	57	57	58	69	1060	596	77	101	104	109
MIN	52	53	53	51	50	52	62	67	67	64	66	97

CAL YR 1981 TOTAL 17041.8 MEAN 46.7 MAX 126 MIN 6.2
WTR YR 1982 TOTAL 33893.0 MEAN 92.9 MAX 1060 MIN 50

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY

LOCATION.--Lat 42°01'28", long 75°07'10", Delaware County, Hydrologic Unit 02040102, on right bank 800 ft (244 m) downstream from Baxter Brook, and 1,100 ft (335 m) downstream from highway bridge at Harvard. Water-quality sampling site at discharge station.

DRAINAGE AREA.--458 mi² (1,186 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to June 1967, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,007.41 ft (307.059 m) National Geodetic Vertical Datum of 1929. Prior to Aug. 12, 1958, water-stage recorder 1,100 ft (335 m) upstream at datum 0.65 ft (0.198 m) higher.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River Basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,400 ft³/s (889 m³/s) Sept. 22, 1938, gage height, 16.93 ft (5.160 m) site and datum then in use, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement at gage height 15.58 ft (4.749 m), minimum, 7.2 ft³/s (0.20 m³/s) Oct. 13, 1954, gage height 1.63 ft (0.497 m) site and datum then in use; minimum daily 7.6 ft³/s (0.22 m³/s) Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft³/s (58.1 m³/s) Feb. 4, gage height, 5.21 ft (1.588 m); minimum discharge, 65 ft³/s (1.84 m³/s) Mar. 9, gage height 1.68 ft (0.512 m); minimum daily, 77 ft³/s (2.18 m³/s) Aug. 16, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	320	147	177	180	120	914	592	208	323	108	133
2	215	280	184	171	450	120	812	612	316	280	93	125
3	184	241	201	165	716	125	853	597	306	245	89	136
4	180	211	194	241	1590	180	1170	568	303	222	89	123
5	177	190	187	442	883	150	772	544	276	194	87	118
6	180	215	180	310	568	130	592	503	313	174	111	116
7	237	222	174	270	350	120	455	422	352	162	118	116
8	237	197	174	240	300	120	382	266	316	177	113	116
9	237	201	171	210	270	130	327	177	289	168	125	113
10	211	194	159	190	260	120	293	150	262	131	95	113
11	197	187	147	180	270	125	283	133	234	123	87	111
12	180	187	144	170	200	220	262	128	211	150	85	111
13	168	177	136	160	180	303	249	133	211	128	83	111
14	156	174	131	150	170	394	280	123	230	128	79	108
15	147	168	130	150	165	390	276	118	194	150	79	111
16	139	168	125	140	160	367	306	116	190	141	77	111
17	133	177	120	135	155	356	476	111	253	136	85	111
18	133	168	115	130	150	345	933	108	215	133	85	108
19	150	165	115	120	140	398	642	106	197	128	81	108
20	136	190	110	115	140	378	503	113	190	150	106	108
21	125	215	120	110	135	451	434	108	180	116	106	108
22	123	208	120	110	135	464	422	113	171	102	85	108
23	141	201	226	110	130	442	823	141	187	95	77	118
24	249	194	303	115	125	447	1030	147	162	95	104	116
25	208	184	257	120	120	485	1030	139	150	91	116	111
26	222	174	230	115	125	871	902	133	141	89	118	108
27	438	174	215	110	130	800	818	125	139	111	116	113
28	952	165	204	110	130	563	716	125	139	111	113	123
29	721	159	190	110	---	451	563	162	262	102	113	106
30	498	147	177	110	---	406	516	177	430	89	111	102
31	386	---	168	110	---	485	---	197	---	95	113	---
TOTAL	7580	5853	5254	5096	8327	10456	18034	7187	7027	4539	3047	3420
MEAN	245	195	169	164	297	337	601	232	234	146	98.3	114
MAX	952	320	303	442	1590	871	1170	612	430	323	125	136
MIN	120	147	110	110	120	120	249	106	139	89	77	102

CAL YR 1981 TOTAL 72137 MEAN 198 MAX 2230 MIN 62
WTR YR 1982 TOTAL 85820 MEAN 235 MAX 1590 MIN 77

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1978 to current year.

INSTRUMENTATION.--Temperature recorder since June 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1978, 1981, and 1982), 28.0°C June 30, 1981; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 24.5°C July 19, 24-26; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.5	9.5	10.5	9.0	7.5	8.0	1.5	.0	.5	1.0	.0	.5
2	14.0	9.5	10.5	9.5	7.5	8.0	3.5	1.0	2.0	.5	.0	.0
3	13.5	9.5	11.0	8.5	6.5	7.5	3.5	2.5	2.5	.0	.0	.0
4	14.0	9.0	10.0	8.0	5.0	6.5	3.5	2.0	2.5	2.0	.0	.5
5	13.0	10.0	11.0	8.5	6.0	7.0	4.0	2.5	3.0	2.0	.5	1.0
6	11.5	10.0	10.5	8.5	7.0	8.0	2.5	.5	1.5	.5	.0	.5
7	11.0	8.5	9.5	7.0	4.0	5.5	2.0	.0	1.5	2.0	.5	1.5
8	9.5	8.5	9.0	6.5	3.5	5.0	2.5	2.0	2.0	.5	.0	.0
9	9.0	8.0	9.0	5.5	4.5	5.0	2.0	.5	1.0	.5	.0	.0
10	10.5	7.0	8.5	5.5	3.5	4.5	.5	.0	.5	1.5	.5	1.0
11	10.5	7.0	8.5	6.0	4.5	5.5	.5	.0	.0	2.0	.5	1.0
12	10.0	7.0	8.5	5.5	3.5	4.5	1.5	.0	1.0	2.5	.0	1.0
13	10.0	7.0	8.5	4.5	2.0	3.0	2.0	1.0	1.5	2.0	.0	1.0
14	10.0	7.0	8.5	5.5	2.5	4.0	1.5	.0	.5	.5	.0	.5
15	9.5	7.0	8.0	7.0	5.0	6.0	2.0	.0	1.0	.5	.0	.0
16	9.0	8.5	8.5	7.5	7.0	7.0	1.0	.0	.5	1.5	.0	.5
17	10.0	7.0	8.0	7.0	7.0	7.0	.5	.0	.5	2.5	.5	1.5
18	8.0	7.0	7.0	7.0	6.5	7.0	1.0	.0	.5	3.5	.0	2.0
19	7.5	6.0	7.0	7.0	6.0	6.5	.5	.0	.0	3.0	.0	1.5
20	8.5	5.0	6.5	7.0	7.0	7.0	.5	.0	.0	.5	.0	.5
21	9.0	5.5	7.5	7.0	4.0	5.5	2.0	.0	1.0	.5	.0	.0
22	9.5	7.5	8.5	4.0	3.5	4.0	.5	.0	.5	2.0	.0	1.0
23	9.5	8.5	9.0	4.0	3.0	3.5	1.0	.0	.5	1.0	.0	.5
24	8.5	6.5	7.5	3.5	2.5	3.0	1.0	.5	.5	1.0	.0	1.0
25	7.0	4.5	5.5	2.5	1.5	2.0	1.5	.5	.5	.0	.0	.0
26	8.5	6.5	7.5	3.5	1.5	2.5	.5	.0	.0	.5	.0	.0
27	10.0	8.5	9.5	5.0	3.0	4.0	.5	.0	.0	1.5	.0	1.0
28	10.0	9.0	9.5	4.5	3.5	4.0	2.0	.0	1.0	.5	.0	.5
29	9.0	7.5	8.0	3.5	2.5	3.0	2.0	1.0	2.0	.5	.0	.5
30	9.0	7.0	8.0	2.5	1.5	2.0	1.0	.0	.5	.5	.0	.5
31	8.5	7.0	7.5	---	---	---	.5	.0	.0	.5	.0	.5
MONTH	14.5	4.5	8.5	9.5	1.5	5.0	4.0	.0	1.0	3.5	.0	.5

01417500 EAST BRANCH DELAWARE RIVER AT HARVARD, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.0	1.0	.0	.0	.0	6.0	3.5	5.0	9.0	5.5	7.5
2	.0	.0	.0	.5	.0	.0	6.5	2.5	4.5	9.5	5.5	7.5
3	.5	.0	.5	.5	.0	.0	4.0	3.5	3.5	9.0	5.5	7.0
4	1.0	.0	1.0	1.0	.0	.0	4.0	1.5	3.0	9.0	5.0	7.0
5	.0	.0	.0	.5	.0	.0	4.5	.5	2.5	11.5	5.0	8.5
6	.5	.0	.0	.0	.0	.0	3.0	.0	1.0	9.0	7.0	8.0
7	.0	.0	.0	.5	.0	.0	1.0	.0	.5	14.5	8.0	11.0
8	.5	.0	.0	.0	.0	.0	3.5	.0	1.5	12.5	11.0	11.5
9	.0	.0	.0	.0	.0	.0	4.0	1.0	2.5	11.5	10.0	10.5
10	.0	.0	.0	.0	.0	.0	6.5	1.5	4.0	15.0	8.5	11.5
11	.5	.0	.0	.5	.0	.0	5.5	2.5	4.0	16.5	9.5	13.0
12	.0	.0	.0	1.5	.0	.5	4.5	2.5	3.5	14.5	11.5	13.5
13	.0	.0	.0	2.0	1.0	1.5	4.5	4.0	4.0	16.5	12.5	14.5
14	.0	.0	.0	4.0	.5	2.0	8.5	3.0	5.5	18.5	12.0	15.0
15	.5	.0	.0	4.5	1.5	2.5	9.5	4.0	7.0	19.0	12.5	15.5
16	.5	.0	.0	3.5	2.0	2.5	11.0	5.5	8.0	19.0	13.5	16.0
17	.5	.0	.0	2.0	2.0	2.0	9.0	7.5	8.5	19.0	14.0	16.5
18	1.0	.0	.0	6.0	2.0	3.5	8.5	6.5	7.0	18.5	14.0	16.0
19	.0	.0	.0	4.0	2.5	3.5	9.5	5.0	7.0	17.5	14.5	16.0
20	.0	.0	.0	6.0	2.0	4.0	10.5	6.5	8.5	19.0	15.0	16.5
21	.5	.0	.5	4.0	3.0	3.5	10.5	6.5	9.0	18.0	15.5	16.5
22	1.0	.0	.5	4.5	2.0	3.0	8.0	5.5	6.5	15.5	12.5	13.5
23	.5	.0	.5	6.0	2.0	4.0	8.0	2.5	5.5	12.0	9.5	10.5
24	.5	.0	.0	5.5	2.5	4.0	8.5	3.5	6.0	10.5	9.0	9.5
25	.5	.0	.0	6.5	2.5	4.5	8.5	4.0	6.5	13.5	10.0	11.5
26	.0	.0	.0	5.0	2.0	3.5	6.5	5.0	6.0	19.5	11.5	15.0
27	.5	.0	.0	2.5	.5	1.5	7.5	5.5	6.5	18.0	14.5	16.5
28	.0	.0	.0	3.5	.0	1.5	9.0	5.0	7.0	17.0	14.5	15.5
29	---	---	---	5.5	.5	3.0	10.0	4.5	7.0	15.5	13.0	14.0
30	---	---	---	7.0	2.0	4.5	10.5	5.5	8.0	15.5	13.0	14.5
31	---	---	---	5.0	4.5	5.0	---	---	---	14.5	13.0	14.0
MONTH	1.0	.0	.0	7.0	.0	2.0	11.0	.0	5.5	19.5	5.0	12.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.5	12.5	13.5	17.5	13.0	15.5	20.5	17.5	19.0	15.5	14.5	15.0
2	17.0	12.5	14.5	17.0	12.5	14.5	21.0	17.0	19.0	17.0	14.0	15.5
3	14.5	12.5	13.5	15.5	13.0	14.0	21.0	17.5	19.0	18.5	15.0	16.5
4	16.0	11.5	13.5	17.0	12.0	14.0	21.5	17.5	19.5	16.0	13.0	14.0
5	14.0	12.5	13.0	20.0	12.5	16.0	22.0	19.0	20.5	16.5	12.0	14.0
6	12.5	11.5	12.0	21.5	15.0	18.0	21.0	17.5	19.5	17.5	12.5	15.0
7	14.0	11.0	12.5	19.5	16.0	17.5	20.5	16.5	18.5	17.0	14.0	15.5
8	16.0	12.0	13.5	23.0	18.0	20.5	19.0	17.0	17.5	15.5	13.0	14.0
9	18.5	12.0	15.0	22.5	17.0	19.5	19.5	16.0	17.0	16.0	12.0	13.5
10	17.5	12.5	15.0	22.0	16.0	19.0	19.5	16.5	18.0	17.5	12.5	15.0
11	15.5	13.0	14.0	20.5	18.0	19.5	20.0	16.0	18.0	17.5	13.0	15.5
12	14.5	12.0	13.0	23.5	17.5	20.0	20.0	15.5	17.5	17.5	13.5	15.5
13	13.5	11.0	12.0	24.0	17.5	20.5	19.0	16.0	17.5	18.0	14.0	16.0
14	14.0	10.0	11.5	23.5	18.5	21.0	19.5	15.0	17.0	18.0	14.5	16.0
15	16.0	11.0	13.5	22.0	17.5	20.0	21.0	15.5	18.0	16.0	14.0	15.0
16	15.5	14.0	14.5	22.5	17.5	20.0	21.5	16.5	19.0	15.5	13.0	14.0
17	15.5	13.0	14.5	23.0	17.5	20.0	20.0	17.5	19.0	13.5	12.0	12.5
18	19.5	13.0	16.0	24.0	18.0	21.5	22.0	16.5	19.0	12.0	10.5	11.5
19	18.5	14.5	16.5	24.5	19.5	22.0	20.5	16.5	18.5	13.5	9.0	11.5
20	17.5	13.5	15.5	22.0	17.0	19.0	18.0	16.0	17.0	11.5	9.5	10.0
21	17.0	13.0	15.5	22.0	14.5	18.0	16.5	14.0	15.5	12.0	9.5	10.5
22	18.5	13.5	16.0	24.0	17.0	20.5	16.0	12.5	14.0	11.5	10.5	11.0
23	17.0	13.0	15.5	24.0	18.5	21.0	18.5	14.0	16.0	12.0	10.5	11.5
24	18.0	13.0	15.5	24.5	17.5	21.0	21.0	16.0	18.0	13.0	10.5	11.5
25	20.0	13.5	16.5	24.5	18.5	21.5	18.0	14.5	16.0	14.0	11.0	12.5
26	18.5	16.0	17.0	24.5	20.0	22.0	18.5	12.5	15.0	13.5	11.0	12.0
27	18.0	15.5	17.0	23.0	19.5	21.0	17.0	14.5	15.5	14.0	12.0	12.5
28	21.0	16.0	18.0	20.5	17.5	18.5	17.0	13.5	15.5	13.5	11.5	12.5
29	19.5	15.0	17.0	21.5	16.0	18.5	16.0	11.5	13.5	14.5	12.0	13.0
30	18.0	14.0	15.5	21.0	17.0	19.0	16.5	12.5	14.5	15.5	12.0	13.5
31	---	---	---	21.5	17.5	19.5	16.5	13.0	15.0	---	---	---
MONTH	21.0	10.0	14.5	24.5	12.0	19.0	22.0	11.5	17.5	18.5	9.0	13.5

01420500 BEAVER KILL AT COOKS FALLS, NY

LOCATION.--Lat 41°56'47", long 74°58'48", Delaware County, Hydrologic Unit 02040102, on left bank 66 ft (20 m) downstream from road bridge in Cooks Falls, and 5.5 mi (8.8 km) downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi^2 (624 km^2).

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950. WSP 1232: 1950(M).

GAGE.--Water-stage recorder. Datum of gage is 1,151.70 ft (351.038 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft (38 m) upstream at same datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diversion at headwaters into Cooper Lake for water supply of Kingston.

AVERAGE DISCHARGE.--68 years (1915-82), 558 ft^3/s (15.80 m^3/s), 31.42 in/yr (798 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft^3/s (895 m^3/s) Mar. 31, 1951, gage height, 16.02 ft (4.883 m), from rating curve extended above 13,000 ft^3/s (368 m^3/s) on basis of slope-area measurement at gage height 15.52 ft (4.730 m), minimum, 16 ft^3/s (0.45 m^3/s) Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,700 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0845	5,080	144	7.73	2.356
Apr. 1	0300	5,630	159	8.04	2.451
Apr. 3	2330	11,300	320	10.71	3.264
Apr. 18	0830	*12,100	343	*10.99	3.350

Minimum discharge, 48 ft^3/s (1.36 m^3/s) Sept. 15, 20, gage height, 0.83 ft (0.253 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	689	270	220	250	210	4540	752	304	390	139	88
2	224	593	554	200	500	200	2940	675	698	323	117	100
3	197	522	607	190	1000	180	4010	612	532	297	113	106
4	175	455	499	450	2500	110	6220	559	446	283	103	93
5	159	412	451	1620	1790	250	2730	504	402	251	97	77
6	165	515	390	963	1300	240	1950	459	594	231	91	70
7	222	654	360	779	900	240	1460	432	1390	217	87	64
8	226	532	340	540	700	230	1180	398	832	206	85	62
9	232	493	320	450	600	180	1000	390	614	192	106	60
10	212	461	300	380	540	200	877	358	504	179	107	58
11	196	433	290	340	470	250	827	320	444	172	93	55
12	185	408	270	320	450	350	759	304	412	282	84	53
13	177	378	260	300	440	500	707	334	491	247	79	51
14	169	359	240	290	420	700	841	298	664	189	77	50
15	162	347	230	270	400	694	940	270	484	167	75	49
16	157	346	220	260	390	643	1160	252	417	152	77	59
17	150	374	200	250	380	639	2090	252	428	149	82	58
18	150	372	180	240	370	645	7220	228	395	146	94	56
19	201	361	170	230	352	792	3210	228	339	133	79	52
20	187	379	160	230	330	774	2220	218	328	143	75	50
21	165	567	170	220	310	925	1880	218	295	144	77	55
22	152	484	200	210	290	971	1490	204	275	126	72	58
23	176	427	300	210	280	982	1150	232	331	117	70	63
24	414	397	400	210	250	1070	965	279	284	110	68	65
25	325	368	330	200	230	1430	854	283	251	103	75	59
26	314	338	280	200	210	2960	800	232	232	99	87	55
27	767	330	270	200	230	2120	1760	203	222	95	74	60
28	3220	320	260	200	230	1420	1290	191	232	136	66	79
29	1760	300	240	200	---	1150	1010	270	418	139	59	72
30	1130	290	220	200	---	1120	850	393	585	111	57	60
31	847	---	200	210	---	2130	---	320	---	101	56	---
TOTAL	12916	12904	9181	10782	16112	24305	58930	10668	13843	5630	2621	1937
MEAN	417	430	296	348	575	784	1964	344	461	182	84.5	64.6
MAX	3220	689	607	1620	2500	2960	7220	752	1390	390	139	106
MIN	100	290	160	190	210	110	707	191	222	95	56	49
CFSM	1.73	1.78	1.23	1.44	2.39	3.25	8.15	1.43	1.91	.76	.35	.27
IN.	1.99	1.99	1.42	1.66	2.49	3.75	9.10	1.65	2.14	.87	.40	.30

CAL YR 1981 TOTAL 179294 MEAN 491 MAX 10900 MIN 60 CFSM 2.04 IN 27.68
WTR YR 1982 TOTAL 179829 MEAN 493 MAX 7220 MIN 49 CFSM 2.05 IN 27.76

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY

LOCATION.--Lat 41°58'23", long 75°10'28", Delaware County, Hydrologic Unit 02040102, on left bank 3,000 ft (914 m) upstream from bridge on County highway 28 at Fishs Eddy, 0.6 mi (1.0 km) upstream from Fish Creek, 4.2 mi (6.8 km) downstream from Beaver Kill, and 11 mi (18 km) upstream from the confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--784 mi^2 (2,031 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 756: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 955.96 ft (291.377 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1928, nonrecording gage and Sept. 28, 1928 to Nov. 1, 1967, water-stage recorder at site 3,000 ft (914 m) downstream at datum 5.0 ft (1.52 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,300 ft^3/s (1,510 m^3/s) Aug. 24, 1933, gage height, 20.60 ft (6.279 m) at former site and datum, from rating curve extended above 22,000 ft^3/s (623 m^3/s); minimum, 52 ft^3/s (1.47 m^3/s) July 23, 1964, gage height, 1.16 ft (0.354 m) at former site and datum; minimum daily, 68 ft^3/s (1.93 m^3/s) Aug. 29, 1949.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 9, 1903, reached a stage of 23.6 ft (7.19 m) at former site and datum, from description obtained in April 1939, from local residents who had experienced the flood (discharge, about 70,000 ft^3/s or 1,980 m^3/s, from rating curve extended above 22,000 ft^3/s or 623 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft^3/s (385 m^3/s) Apr. 4, gage height, 9.28 ft (2.89 m); maximum gage height 15.23 ft (4.642 m) Feb. 4 (ice jam), minimum discharge, 151 ft^3/s (4.28 m^3/s) Aug. 24, gage height, 2.73 ft (0.832 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	1300	563	400	400	330	6450	1610	653	1020	284	218
2	483	1120	848	400	600	400	4670	1570	1140	847	253	258
3	483	980	1010	415	1500	290	5000	1480	1100	755	228	279
4	448	861	887	867	3900	270	9100	1390	972	699	223	247
5	422	778	822	2230	3190	500	4460	1290	882	616	209	218
6	431	939	769	1400	2360	480	3230	1200	1080	559	214	204
7	564	1100	707	1200	1600	400	2410	1090	1960	509	233	191
8	591	927	735	1000	1300	330	1990	864	1480	502	223	187
9	606	889	701	800	1100	300	1720	755	1200	464	274	187
10	563	849	632	620	900	350	1510	691	1020	414	247	178
11	525	806	601	600	860	500	1440	616	909	381	214	170
12	488	775	578	600	820	700	1330	580	830	486	187	166
13	454	730	557	580	780	1000	1240	609	856	517	178	166
14	422	698	499	580	740	1500	1400	559	1120	407	170	170
15	395	676	500	560	700	1470	1510	517	900	400	162	174
16	375	669	450	560	660	1380	1780	479	796	374	162	170
17	357	708	400	540	640	1360	2960	464	856	355	170	170
18	356	690	350	520	600	1330	8780	428	796	343	200	170
19	424	678	322	500	560	1590	4510	428	699	324	178	174
20	412	741	345	500	520	1530	3230	421	668	355	191	170
21	364	975	362	480	500	1840	2730	414	616	330	200	174
22	339	878	443	470	480	1890	2250	400	580	279	178	170
23	379	813	708	460	450	1880	2330	464	661	247	155	204
24	782	773	979	450	420	1970	2370	539	587	238	170	204
25	681	724	760	450	390	2340	2250	552	525	218	214	191
26	662	677	614	440	370	4750	2080	471	479	214	223	183
27	1390	677	591	440	360	3820	2870	421	464	223	214	191
28	4790	667	560	430	350	2610	2310	407	464	301	191	214
29	3030	635	500	420	---	2110	1870	494	821	295	183	209
30	2040	592	450	410	---	1930	1630	699	1440	242	174	183
31	1580	---	400	400	---	2840	---	661	---	218	174	---
TOTAL	25117	24325	18643	19722	27050	43990	91410	22563	26554	13132	6276	5790
MEAN	810	811	601	636	966	1419	3047	728	885	424	202	193
MAX	4790	1300	1010	2230	3900	4750	9100	1610	1960	1020	284	279
MIN	281	592	322	400	350	270	1240	400	464	214	155	166

CAL YR 1981 TOTAL 296166 MEAN 811 MAX 11200 MIN 143
WTR YR 1982 TOTAL 324572 MEAN 889 MAX 9100 MIN 155

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-75 (d).
BIOLOGICAL DATA:
Bacteria--1971 (c), 1973-75 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1967 to current year.

INSTRUMENTATION.--Temperature recorder since November 1967.

REMARKS.--No record Oct. 1-14, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1978, 1980-82), 31.5°C Aug. 2, 1975; minimum (water years 1968-76, 1978-79, 1981-82), freezing point on many days during winter periods, except water year 1978.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 19; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.0	7.5	8.0	.5	.0	.0	.0	.0	.0
2	---	---	---	9.5	7.5	8.5	2.0	.5	1.5	.0	.0	.0
3	---	---	---	8.5	7.0	7.5	2.5	2.0	2.5	.0	.0	.0
4	---	---	---	8.0	5.5	6.5	2.5	2.0	2.5	1.0	.0	.5
5	---	---	---	8.0	6.0	7.0	3.0	2.0	2.5	.5	.0	.5
6	---	---	---	8.5	7.0	8.0	2.0	.0	1.0	.5	.0	.0
7	---	---	---	6.5	4.0	5.0	1.5	.0	.5	1.0	.5	.5
8	---	---	---	6.0	3.5	4.5	2.0	1.5	1.5	.5	.0	.5
9	---	---	---	5.0	4.0	4.5	1.5	.0	.5	.0	.0	.0
10	---	---	---	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
11	---	---	---	5.5	4.5	5.0	.0	.0	.0	.0	.0	.0
12	---	---	---	5.0	3.0	4.0	.5	.0	.0	.0	.0	.0
13	---	---	---	4.0	2.0	3.0	.5	.0	.5	.0	.0	.0
14	---	---	---	4.5	2.5	4.0	.5	.0	.0	.0	.0	.0
15	10.0	7.0	8.5	6.5	4.5	6.0	.5	.0	.0	.0	.0	.0
16	9.0	8.5	9.0	7.5	6.5	7.0	.5	.0	.0	.0	.0	.0
17	10.5	7.0	8.5	7.0	7.0	7.0	.0	.0	.0	.0	.0	.0
18	8.5	7.5	7.5	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
19	7.5	6.0	7.0	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0
20	8.5	5.0	6.5	7.0	6.5	7.0	.0	.0	.0	.0	.0	.0
21	9.5	6.0	7.5	6.5	4.0	5.0	.0	.0	.0	.0	.0	.0
22	10.0	7.5	9.0	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
23	10.0	8.5	9.5	3.0	2.5	3.0	.0	.0	.0	.0	.0	.0
24	8.5	6.0	7.5	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
25	6.5	4.5	5.5	2.0	1.0	1.5	1.0	.0	.0	.0	.0	.0
26	8.5	6.5	7.5	2.5	.5	1.5	.0	.0	.0	.0	.0	.0
27	10.5	8.5	10.0	4.0	2.5	3.5	.0	.0	.0	.0	.0	.0
28	10.5	9.0	10.0	4.0	2.5	3.5	1.0	.0	.5	.0	.0	.0
29	8.5	7.5	8.0	2.5	1.5	2.0	.5	.0	.5	.0	.0	.0
30	8.5	7.5	8.0	2.0	.5	1.5	.5	.0	.0	.0	.0	.0
31	8.5	6.5	7.5	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	10.5	4.5	8.0	9.5	.5	5.0	3.0	.0	.5	1.0	.0	.0

01421000 EAST BRANCH DELAWARE RIVER AT FISHS EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	1.0	.0	.0	5.5	3.0	4.0	11.0	8.0	9.5
2	.0	.0	.0	.5	.0	.0	5.5	2.5	4.0	11.5	8.5	10.0
3	.0	.0	.0	1.5	.0	.0	4.0	3.0	3.5	11.0	8.5	10.0
4	.5	.0	.5	.0	.0	.0	3.0	1.5	2.5	11.0	8.0	9.5
5	.0	.0	.0	1.0	.0	.0	4.0	.5	2.5	13.0	7.5	10.0
6	.5	.0	.5	1.0	.0	.0	3.0	.0	1.0	11.5	9.5	10.5
7	.0	.0	.0	.0	.0	.0	.5	.0	.0	15.5	9.5	12.5
8	.5	.0	.0	1.0	.0	.0	3.0	.0	1.0	14.0	12.5	13.0
9	.0	.0	.0	.5	.0	.0	3.5	1.0	2.0	12.5	11.0	11.5
10	.0	.0	.0	1.0	.0	.0	5.5	1.0	3.5	15.5	9.5	12.5
11	.0	.0	.0	1.5	.0	.5	4.5	2.5	3.5	16.5	10.5	13.5
12	.0	.0	.0	.5	.0	.0	4.5	2.5	3.5	16.0	12.5	14.0
13	.0	.0	.0	.0	.0	.0	4.0	3.0	3.5	17.5	13.5	15.5
14	.0	.0	.0	2.0	.0	1.0	8.0	3.0	5.5	19.0	13.5	16.0
15	.5	.0	.0	4.0	1.0	2.5	8.5	3.5	6.5	20.0	14.0	17.0
16	1.0	.5	.5	3.0	1.5	2.0	10.0	5.5	7.5	20.0	15.0	17.5
17	1.5	.0	.5	2.0	1.5	2.0	8.5	7.5	8.0	20.0	16.0	17.5
18	2.5	.0	1.0	5.5	1.5	3.5	7.5	5.0	6.0	19.0	15.5	17.5
19	.5	.0	.0	4.0	3.0	3.5	9.0	4.5	6.5	18.5	15.5	17.5
20	1.0	.0	.5	5.5	2.5	3.5	9.5	6.0	8.0	20.5	16.5	18.0
21	1.0	.5	1.0	4.0	3.0	3.5	10.0	7.5	9.0	19.0	16.5	18.0
22	2.5	.5	1.0	4.0	2.5	3.0	7.5	5.0	6.5	17.0	13.5	15.0
23	2.5	.5	1.5	5.5	2.0	3.5	8.5	4.0	6.0	13.5	11.0	12.0
24	1.5	.0	.5	5.0	2.0	3.5	10.0	5.5	8.0	11.5	10.5	11.0
25	.5	.0	.0	6.0	2.5	4.0	11.0	6.5	8.5	14.5	11.0	12.5
26	.5	.0	.0	4.5	2.5	3.5	9.5	7.5	8.5	20.0	13.0	16.0
27	.5	.0	.0	2.5	1.0	1.5	10.5	8.0	9.0	19.5	16.0	18.0
28	1.0	.0	.0	3.0	.0	1.0	11.0	7.5	9.0	18.5	16.0	17.0
29	---	---	---	4.5	.5	2.5	11.0	7.0	9.0	18.0	15.0	16.0
30	---	---	---	6.5	2.0	4.0	12.0	8.0	10.0	17.0	15.5	16.5
31	---	---	---	4.5	4.0	4.5	---	---	---	16.0	15.5	16.0
MONTH	2.5	.0	.5	6.5	.0	1.5	12.0	.0	5.5	20.5	7.5	14.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.5	15.0	15.5	18.5	14.5	16.5	23.5	20.5	22.0	20.0	18.5	19.0
2	18.0	14.0	16.0	18.0	13.5	16.0	23.5	20.0	21.5	22.0	18.5	20.0
3	15.5	13.5	15.0	16.5	14.5	15.5	24.0	20.5	21.5	22.0	19.0	20.0
4	16.5	13.0	15.0	18.5	13.5	16.0	24.0	20.5	22.5	18.5	16.0	17.5
5	20.0	14.0	15.0	20.5	14.5	17.5	25.5	22.0	23.5	20.5	15.0	17.5
6	13.5	12.5	13.0	22.5	16.5	19.5	25.0	21.5	23.0	21.5	16.0	18.5
7	14.5	12.0	13.5	23.0	18.0	21.0	25.0	21.0	23.0	21.5	17.5	19.0
8	16.5	12.5	14.5	25.0	21.0	22.5	23.5	21.5	22.0	19.0	16.5	17.5
9	18.5	13.0	16.0	25.0	20.5	23.0	24.0	20.5	22.0	20.5	15.5	17.5
10	17.5	14.5	16.0	24.5	19.5	22.0	24.0	21.0	22.5	21.5	16.5	19.0
11	16.0	14.0	15.0	23.0	20.5	22.0	22.5	20.0	21.0	22.0	17.0	19.5
12	15.5	13.5	14.5	25.0	20.5	22.5	22.5	18.0	20.5	22.0	17.0	19.5
13	14.5	11.5	12.5	25.0	20.0	22.5	22.0	18.5	20.5	22.5	18.0	20.0
14	15.0	11.0	13.0	25.0	21.0	23.0	22.0	17.5	20.0	22.5	18.5	20.5
15	16.5	12.5	14.5	25.5	21.0	23.0	23.0	18.0	20.5	20.5	19.0	19.5
16	17.5	15.0	16.0	26.5	21.5	24.0	24.5	19.5	22.0	20.0	18.0	19.0
17	17.0	15.0	16.0	27.0	22.0	24.5	23.0	21.0	22.0	18.5	15.5	16.5
18	20.5	15.0	17.5	27.5	23.0	25.5	24.5	19.5	21.5	15.5	14.0	14.5
19	20.0	16.5	18.0	28.0	24.0	26.0	23.5	19.0	21.5	17.5	12.0	14.5
20	18.5	16.0	17.0	25.5	21.5	23.5	21.0	19.5	20.0	14.5	12.5	13.0
21	18.5	15.0	16.5	25.0	19.0	22.0	21.0	17.5	19.0	15.5	12.0	13.5
22	20.0	15.0	17.5	26.0	20.0	23.0	19.5	16.0	17.5	15.0	13.5	14.5
23	18.5	16.0	17.0	25.5	21.0	23.5	21.0	16.5	18.5	15.0	13.5	14.0
24	19.0	15.0	17.0	26.5	20.5	23.5	23.5	18.5	21.0	16.0	13.0	14.5
25	20.5	15.0	17.5	26.0	21.0	24.0	21.0	18.0	19.5	17.0	14.0	15.5
26	20.5	17.5	19.0	27.0	22.5	24.5	22.0	15.5	19.0	16.5	14.0	15.5
27	20.5	17.5	19.0	25.5	22.0	24.0	21.0	18.0	19.5	18.0	15.0	16.0
28	22.5	18.0	20.5	23.0	21.0	22.0	21.0	17.0	18.5	17.0	14.5	15.5
29	21.5	17.0	19.0	23.5	19.0	21.0	19.5	14.5	17.0	17.5	14.5	16.0
30	19.5	15.5	17.0	23.0	19.0	21.0	20.5	15.0	17.5	19.0	14.5	16.5
31	---	---	---	24.0	20.5	22.0	20.5	16.5	18.5	---	---	---
MONTH	22.5	11.0	16.0	28.0	13.5	22.0	25.5	14.5	20.5	22.5	12.0	17.0

01423000 WEST BRANCH DELAWARE RIVER AT WALTON, NY

LOCATION.--Lat 42°09'58", long 75°08'26", Delaware County, Hydrologic Unit 02040101, on left bank at west end of fairgrounds at Walton, and 100 ft (30 m) downstream from West Brook.

DRAINAGE AREA.--332 mi^2 (860 km^2), revised.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,190.30 ft (362.803 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are fair.

AVERAGE DISCHARGE.--32 years, 587 ft^3/s (16.62 m^3/s), 24.01 in/yr (610 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft^3/s (507 m^3/s) Feb. 11, 1981, gage height, 14.34 ft (4.371 m), minimum, 12 ft^3/s (0.34 m^3/s) Sept. 15, Nov. 22, 1964, minimum gage height, 1.86 ft (0.567 m) Nov. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges at or above base of 4,600 ft^3/s (130 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1100	4,600	130	8.53	2.600
Feb. 4	0200	Unknown		*[a]11.23	3.423
Feb. 4	0830	*7,600	215	10.30	3.139

[a] Ice jam.

Minimum discharge, 30 ft^3/s (0.85 m^3/s) Sept. 15, minimum gage height, 2.36 ft (0.719 m) Sept. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	1060	315	320	900	120	2810	359	428	1120	128	46
2	494	889	485	320	2550	110	2160	332	578	825	106	46
3	454	754	522	350	2200	100	2300	312	514	668	105	45
4	454	650	449	973	6740	90	3650	292	491	572	100	43
5	399	575	431	2520	2870	150	2250	267	452	467	88	41
6	401	696	413	1200	2060	250	1850	248	573	393	81	38
7	612	836	360	1000	1400	200	1390	238	631	337	76	37
8	745	677	350	800	1200	170	1260	220	511	333	72	36
9	678	697	350	680	1000	140	1090	243	444	294	73	35
10	573	627	340	540	900	240	999	283	389	241	74	35
11	509	593	342	450	800	291	933	224	344	212	70	34
12	450	563	332	420	700	1530	848	203	323	250	65	33
13	403	517	307	380	640	2020	838	222	324	221	62	33
14	358	494	288	350	580	2230	1060	197	424	179	59	32
15	322	476	280	330	520	1540	877	177	325	183	58	31
16	296	469	270	310	480	1320	861	165	294	166	56	33
17	274	471	250	290	450	1600	1050	158	588	144	57	37
18	258	446	230	280	413	1640	2270	149	469	133	55	38
19	311	452	210	270	394	1810	1610	141	355	121	53	36
20	274	478	200	270	363	1500	1240	148	336	134	52	35
21	235	546	190	330	332	1740	1060	151	303	138	56	33
22	211	488	230	320	306	1750	915	144	277	116	52	33
23	261	446	600	300	281	1560	790	219	302	102	50	39
24	571	425	972	280	265	1540	686	345	272	94	49	43
25	418	401	620	270	210	1720	601	288	227	87	54	41
26	421	377	520	260	180	2940	559	224	201	81	67	38
27	1330	407	480	250	160	2340	604	194	191	76	60	40
28	3840	429	440	240	140	1640	505	184	478	95	51	41
29	2540	380	400	240	---	1390	437	273	1190	242	46	40
30	1750	345	350	230	---	1260	396	456	2200	137	43	37
31	1320	---	330	250	---	1620	---	369	---	114	42	---
TOTAL	21415	16664	11856	15023	29034	36551	37899	7425	14434	8275	2060	1129
MEAN	691	555	382	485	1037	1179	1263	240	481	267	66.5	37.6
MAX	3840	1060	972	2520	6740	2940	3650	456	2200	1120	128	46
MIN	211	345	190	230	140	90	396	141	191	76	42	31
CFSM	2.08	1.67	1.15	1.46	3.12	3.55	3.80	.72	1.45	.80	.20	.11
IN.	2.40	1.87	1.33	1.68	3.25	4.10	4.25	.83	1.62	.93	.23	.13

CAL YR 1981 TOTAL 184021 MEAN 504 MAX 9060 MIN 36 CFSM 1.52 IN 20.62
WTR YR 1982 TOTAL 201765 MEAN 553 MAX 6740 MIN 31 CFSM 1.67 IN 22.61

DELAWARE RIVER BASIN

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY

LOCATION.--Lat 42°04'29", long 75°23'47", Delaware County, Hydrologic Unit 02040101, on right bank at Stilesville, 0.5 mi (0.8 km) upstream from Cold Spring Creek, 1.4 mi (2.3 km) downstream from Cannonsville Dam, and 2.0 mi (3.2 km) northeast of Deposit. Water-quality sampling site at discharge station.

DRAINAGE AREA.--456 mi^2 (1,181 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1952 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 992.23 ft (302.432 m) National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York). Prior to Oct. 1, 1964, at site 600 ft (183 m) downstream at datum 1.37 ft (0.418 m) higher.

REMARKS.--Records good above 2,000 ft^3/s (56.6 m^3/s), poor below. Subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s (496 m^3/s) Jan. 22, 1959, gage height, 9.01 ft (2.746 m), site and datum then in use, minimum daily 7.2 ft^3/s (0.20 m^3/s) Feb. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,100 ft^3/s (87.8 m^3/s) Apr. 5, gage height, 9.48 ft (2.890 m); minimum daily, 34 ft^3/s (0.963 m^3/s) Jan. 16-24; minimum gage height, 3.64 ft (0.821 m) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	39	41	42	47	36	63	682	53	1290	600	977
2	560	39	42	42	44	36	61	622	58	1260	530	994
3	590	39	42	42	50	36	470	570	66	1060	530	1330
4	520	39	41	45	53	36	2260	530	58	889	658	1350
5	382	39	41	45	45	37	3080	486	63	706	889	1390
6	202	41	41	44	39	37	3030	446	88	560	1200	1100
7	394	41	41	44	38	37	2580	418	182	438	1230	1080
8	345	40	42	43	37	37	2130	394	308	370	889	1180
9	540	40	42	43	37	37	1880	388	388	446	863	1220
10	486	40	41	42	37	37	1650	418	424	520	863	1460
11	376	40	41	38	37	37	1500	400	430	340	915	1480
12	470	40	41	35	37	40	1370	320	424	330	863	1270
13	530	69	41	35	38	42	1290	262	694	330	1150	1110
14	570	155	41	35	37	42	1300	212	682	335	1180	976
15	646	55	42	35	37	42	1300	143	520	330	889	947
16	889	42	41	34	37	42	1240	100	412	520	928	1170
17	706	41	41	34	37	43	1320	67	388	580	980	1490
18	365	41	41	34	37	43	1990	53	382	340	941	1460
19	706	41	41	34	37	44	2430	53	355	330	863	1200
20	790	42	41	34	37	45	2260	54	330	330	1240	1220
21	730	42	41	34	37	47	2030	284	330	330	1160	1170
22	478	41	111	34	37	47	1800	177	330	330	952	1180
23	53	41	97	34	37	47	1570	66	330	850	928	1120
24	149	41	47	34	37	47	1380	56	330	814	937	1350
25	320	41	42	37	36	49	1210	54	330	345	332	1320
26	202	41	42	41	36	55	1090	53	330	658	792	915
27	265	41	42	41	36	50	1050	52	330	742	1210	1000
28	65	41	42	41	36	47	967	53	330	494	1210	1170
29	41	41	42	41	---	47	863	54	370	325	872	1250
30	39	41	42	41	---	54	766	52	967	706	912	1260
31	39	---	42	43	---	58	---	54	---	889	977	---
TOTAL	12500	1374	1415	1201	1090	1334	45930	7573	10282	17787	28483	36139
MEAN	403	45.8	45.6	38.7	38.9	43.0	1531	244	343	574	919	1205
MAX	889	155	111	45	53	58	3080	682	967	1290	1240	1490
MIN	39	39	41	34	36	36	61	52	53	325	332	915

CAL YR 1981 TOTAL 87681 MEAN 240 MAX 1120 MIN 11
WTR YR 1982 TOTAL 165108 MEAN 452 MAX 3080 MIN 34

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963 to current year.
CHEMICAL DATA: 1959-60 (a) unpublished; 1969 (a); 1970 (a) unpublished; 1971, 1973 (b); 1974 (d); 1975 (b).
MINOR ELEMENTS DATA: 1971 (b).
NUTRIENT DATA: 1970 (a) unpublished, 1971, 1973 (b); 1974 (d); 1975 (b).
BIOLOGICAL DATA:
Bacteria--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1962 to current year.

INSTRUMENTATION.--Temperature recorder since October 1962.

REMARKS.--Water temperature is affected by release of water from upstream reservoir.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1963-78, 1980-82), 30.5°C July 2, 1963; minimum, freezing point on many days during winter periods, except 1969 and 1973.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 20.5°C on June 9; minimum, freezing point on many days during January to March.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.5	10.5	11.0	12.5	9.5	10.5	4.5	2.5	3.0	2.5	1.0	2.0
2	14.5	11.0	13.5	13.0	9.0	10.5	6.5	4.5	5.5	2.5	.0	1.0
3	14.0	13.5	13.5	12.5	7.5	9.5	6.0	4.5	5.0	1.5	.5	1.0
4	14.5	13.5	14.0	12.5	6.5	9.0	6.0	4.0	5.0	3.0	1.5	2.0
5	14.0	13.5	13.5	12.5	8.0	10.0	6.0	3.5	5.0	2.0	.5	1.0
6	13.5	13.0	13.5	10.5	8.0	10.0	3.5	2.0	2.5	2.0	.5	1.0
7	13.0	12.5	12.5	8.0	5.5	6.0	5.5	2.0	4.0	2.0	.5	1.5
8	13.5	12.5	13.0	11.0	5.5	8.0	4.5	3.5	4.0	1.0	.0	.5
9	13.5	13.0	13.0	8.5	6.5	7.5	3.5	2.0	2.5	1.0	.0	.5
10	14.5	12.5	13.0	9.5	5.5	7.0	3.5	1.5	2.5	.5	.0	.0
11	14.0	12.0	12.5	9.0	7.0	8.0	3.5	2.0	3.0	.5	.0	.0
12	13.5	11.5	12.0	9.0	5.5	7.0	3.5	3.0	3.0	.0	.0	.0
13	13.5	11.5	12.0	9.0	5.0	7.0	3.5	2.5	3.0	.0	.0	.0
14	13.0	11.5	12.0	9.5	6.0	8.5	3.5	2.0	3.0	.0	.0	.0
15	12.5	11.0	11.5	9.5	7.5	8.5	4.5	2.0	3.0	.0	.0	.0
16	12.0	11.5	11.5	9.0	8.5	8.5	3.0	1.5	2.5	.0	.0	.0
17	13.0	11.0	11.5	8.5	8.0	8.0	3.0	1.5	2.0	.0	.0	.0
18	11.5	11.0	11.5	8.0	7.5	7.5	3.0	1.5	2.0	.0	.0	.0
19	11.5	10.5	11.0	9.0	6.5	7.5	2.5	1.0	1.5	.0	.0	.0
20	12.5	11.0	11.5	8.5	7.5	8.0	1.5	.5	1.0	.0	.0	.0
21	12.5	11.0	11.5	7.5	5.0	6.0	2.0	.5	1.5	.5	.0	.0
22	13.0	11.5	12.0	6.0	4.5	5.0	3.0	1.5	2.5	.0	.0	.0
23	12.0	10.0	11.5	6.0	4.0	5.0	3.5	2.0	3.0	.0	.0	.0
24	11.5	8.0	9.5	6.5	4.5	5.0	4.0	2.5	3.0	.5	.0	.0
25	11.5	10.0	11.0	5.5	3.5	4.5	4.5	1.0	2.5	.0	.0	.0
26	11.5	10.5	11.0	7.0	4.0	5.0	3.0	1.0	2.0	.5	.0	.0
27	12.0	11.5	11.5	7.5	5.5	6.0	2.5	1.5	2.0	.5	.0	.0
28	12.5	9.5	11.5	6.0	4.5	5.5	4.5	2.0	3.0	.5	.0	.0
29	11.0	9.0	10.0	5.5	4.0	4.5	3.0	1.0	2.0	1.0	.0	.5
30	13.5	9.0	10.5	5.0	3.0	4.0	3.0	.5	1.5	.5	.0	.5
31	13.0	7.5	9.5	---	---	---	2.5	.5	1.5	1.0	1.0	1.0
MONTH	14.5	7.5	12.0	13.0	3.0	7.0	6.5	.5	3.0	3.0	.0	.5

01425000 WEST BRANCH DELAWARE RIVER AT STILESVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.5	.0	1.0	2.5	.0	1.0	8.0	3.5	5.0	7.0	5.0	6.0
2	1.5	.0	1.0	3.5	.5	2.0	9.0	1.5	5.0	7.0	5.0	6.0
3	1.5	1.0	1.5	4.0	.0	1.0	4.5	1.5	2.5	8.5	5.5	7.0
4	2.0	.5	1.5	.0	.0	.0	2.0	1.5	2.0	9.0	7.0	8.0
5	1.5	.0	.5	4.0	.0	1.5	2.0	1.5	2.0	11.0	7.0	8.5
6	2.0	.0	1.0	3.5	.0	1.5	2.0	1.5	1.5	11.0	8.0	9.5
7	2.0	.0	.5	2.0	.5	1.0	2.0	1.5	1.5	14.0	9.5	11.5
8	3.0	.0	1.0	3.5	.0	1.0	2.5	1.5	2.0	11.5	10.0	11.0
9	1.5	.5	1.0	1.5	.0	.5	2.5	1.5	2.0	11.0	7.5	9.5
10	2.0	.0	.5	3.0	.0	1.0	2.5	2.0	2.0	12.5	9.0	10.5
11	1.5	.0	.5	5.5	1.0	3.0	2.5	2.0	2.0	12.5	9.5	10.5
12	1.5	.0	.5	4.0	2.0	2.5	2.5	2.0	2.0	12.5	9.5	11.0
13	2.0	.5	1.0	3.5	1.5	2.5	2.5	2.0	2.5	14.5	11.0	12.5
14	2.0	.0	1.0	6.5	1.0	3.0	3.0	2.0	2.5	15.5	11.0	13.0
15	3.5	.5	2.0	7.5	.5	3.0	3.5	2.0	2.5	15.5	10.0	12.5
16	3.5	1.5	2.5	4.5	1.0	2.5	4.0	2.5	3.0	16.0	10.5	12.5
17	3.5	1.0	2.0	2.5	2.0	2.0	4.0	3.0	3.5	14.0	8.0	10.5
18	5.0	1.0	2.0	8.5	2.0	4.5	3.5	2.5	3.0	13.5	6.5	9.5
19	1.5	.5	1.0	3.5	2.5	3.0	3.5	2.5	3.0	12.0	7.0	9.5
20	3.0	1.0	2.0	8.5	2.0	4.5	4.0	3.0	3.5	13.5	7.0	10.0
21	3.0	1.5	2.0	3.5	2.5	3.5	4.0	3.0	3.5	8.0	4.5	6.0
22	5.0	1.0	2.0	5.5	2.0	3.5	3.5	3.0	3.5	7.5	4.5	6.0
23	4.5	.5	2.5	9.0	1.5	4.5	4.5	3.0	3.5	7.5	6.5	7.0
24	1.5	.5	1.0	8.5	1.5	4.5	5.0	3.5	4.0	8.5	6.5	7.0
25	2.5	.0	.5	10.0	2.0	5.5	5.0	3.5	4.0	11.0	6.5	8.5
26	2.0	.0	.5	5.0	2.0	4.0	4.5	4.0	4.0	15.5	7.0	10.0
27	3.0	.0	1.0	4.0	.0	1.5	5.0	4.0	4.5	12.0	7.0	9.0
28	4.5	.0	1.5	5.5	.0	2.5	5.5	4.5	5.0	10.5	7.5	8.5
29	---	---	---	9.5	.5	4.0	6.5	4.0	5.5	11.0	7.5	8.5
30	---	---	---	10.5	2.0	5.5	7.0	5.5	6.5	13.0	7.5	9.5
31	---	---	---	6.5	4.0	5.5	---	---	---	10.5	8.0	9.0
MONTH	5.0	.0	1.5	10.5	.0	3.0	9.0	1.5	3.0	16.0	4.5	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.0	8.0	10.5	17.0	16.0	16.5	7.5	5.5	6.5	8.5	7.5	8.0
2	16.5	8.0	11.5	16.5	15.5	16.0	8.0	6.0	6.5	9.0	8.0	8.5
3	12.0	9.0	10.0	15.5	14.5	15.0	8.0	6.0	6.5	8.5	7.5	8.0
4	15.0	8.0	10.5	14.5	13.5	14.0	7.5	6.0	6.5	8.5	7.5	8.0
5	11.5	8.5	10.0	14.0	12.0	13.0	7.0	6.0	6.5	9.0	7.5	8.5
6	13.0	10.5	11.0	13.5	10.5	12.0	7.5	6.0	6.5	9.0	8.0	8.5
7	17.5	12.0	14.5	12.0	9.0	10.5	7.5	6.0	6.5	9.5	8.0	8.5
8	19.0	15.0	16.5	11.0	7.0	8.5	6.5	6.0	6.5	8.5	8.0	8.5
9	20.5	16.0	18.0	8.0	6.0	7.0	7.5	6.5	7.0	9.5	8.0	8.5
10	19.5	16.5	17.5	7.5	5.5	6.5	7.0	6.0	6.5	9.5	8.5	9.0
11	17.5	16.0	16.5	8.0	5.5	6.5	7.0	6.0	6.5	9.5	8.5	9.0
12	17.5	16.0	17.0	8.5	5.5	6.5	7.5	6.0	6.5	10.0	9.0	9.0
13	16.0	12.0	12.5	8.0	5.5	6.5	7.5	6.0	6.5	10.5	9.0	9.5
14	12.5	11.0	12.0	8.5	5.5	6.5	7.5	6.0	6.5	10.5	8.5	9.5
15	11.5	8.5	10.5	8.0	5.5	6.5	7.5	6.0	7.0	9.5	8.5	9.0
16	9.0	7.0	8.0	7.5	5.5	6.0	7.5	6.5	7.0	10.0	9.0	9.5
17	9.0	6.5	7.5	8.5	5.5	6.5	7.0	6.5	7.0	10.0	9.0	9.5
18	10.0	7.0	8.5	8.5	5.5	6.5	8.0	6.5	7.0	10.0	9.0	9.5
19	9.0	6.0	7.5	8.0	5.5	6.5	7.5	6.5	7.0	10.5	9.5	10.0
20	7.0	5.0	6.0	7.0	5.5	6.0	7.5	7.0	7.0	10.0	9.5	10.0
21	7.0	5.0	6.0	8.5	5.0	6.5	8.0	7.0	7.5	10.5	10.0	10.5
22	8.0	5.0	6.0	8.5	5.5	6.5	8.5	7.0	7.5	10.5	10.0	10.5
23	7.0	5.0	5.5	7.0	5.5	6.0	8.5	7.0	7.5	11.0	10.5	10.5
24	7.5	5.0	6.0	8.5	5.5	6.5	8.5	7.0	7.5	11.5	10.5	11.0
25	8.0	5.0	6.0	8.5	5.5	6.5	8.5	7.0	8.0	11.5	10.5	11.0
26	7.0	5.0	6.0	8.0	5.5	6.5	8.5	6.5	7.5	11.5	11.0	11.5
27	7.5	5.0	6.0	7.5	6.0	6.5	8.0	7.5	7.5	12.5	11.0	11.5
28	7.5	5.0	6.0	7.5	6.0	6.5	8.5	7.0	7.5	12.5	11.0	12.0
29	10.0	5.5	6.5	8.5	5.5	6.5	8.5	7.5	8.0	13.0	12.0	12.0
30	16.5	10.5	14.5	8.0	5.5	6.5	8.5	7.5	8.0	13.5	12.0	12.5
31	---	---	---	7.5	6.0	6.5	8.5	7.5	8.0	---	---	---
MONTH	20.5	5.0	10.0	17.0	5.0	8.0	8.5	5.5	7.0	13.5	7.5	9.5

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY

LOCATION.--42°00'11", long 75°23'02", Delaware County, Hydrologic Unit 02040101, on left bank at downstream side of bridge on County Highway 56 in Hale Eddy, and 9 mi (14 km) upstream from confluence of East and West Branches near Hancock. Water-quality sampling site at discharge station.

DRAINAGE AREA.--595 mi^2 (1,541 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 871: 1916.

GAGE.--Water-stage recorder. Datum of gage is 946.46 ft (288.481 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1928, nonrecording gage.

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximun discharge, 28,900 ft^3/s (818 m^3/s) Mar. 22, 1948, gage height, 15.69 ft (4.782 m), maximum gage height, 15.8 ft (4.82 m) Sept. 30, 1924, from graph based on gage readings, minimum discharge, 17 ft^3/s (0.48 m^3/s) Oct. 20, 1963, minimum gage height, 1.03 ft (0.314 m) Aug. 4, 1936.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1903, reached a stage of 20.3 ft (6.19 m), from floodmarks, discharge, about 46,000 ft^3/s (1,300 m^3/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,900 ft^3/s (110 m^3/s) Apr. 4, gage height, 6.56 ft (1.999 m); maximum gage height, 8.74 ft (2.664 m) Feb. 4 (ice jam); minimum discharge, 86 ft^3/s (2.44 m^3/s) Oct. 1, gage height, 1.44 ft (0.439 m); minimum daily, 104 ft^3/s (2.95 m^3/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	261	159	110	160	120	1930	842	523	1480	673	946
2	538	222	201	110	170	120	1260	773	650	1390	559	946
3	717	192	225	110	220	120	1640	728	461	1190	559	1240
4	645	167	204	160	400	120	3630	673	443	1000	623	1260
5	499	154	195	210	300	120	3770	617	365	830	842	1300
6	248	241	170	190	230	120	3500	574	447	684	1130	1080
7	528	275	160	180	180	130	2980	538	528	554	1160	1020
8	533	241	170	170	160	130	2520	509	590	470	921	1100
9	656	261	170	160	150	130	2220	523	634	509	842	1150
10	639	235	170	150	140	130	1990	612	634	590	819	1340
11	504	219	170	140	140	200	1840	544	623	425	902	1380
12	538	201	165	140	140	300	1670	452	606	466	819	1210
13	617	207	149	130	140	400	1610	369	866	416	1070	1100
14	628	282	150	130	140	700	1690	307	915	452	1100	939
15	701	201	150	130	130	660	1680	235	712	480	896	884
16	908	192	140	130	130	623	1670	181	596	601	872	1090
17	807	210	140	130	130	549	1950	142	712	623	952	1370
18	470	195	130	130	130	601	3170	117	628	461	896	1380
19	678	210	130	130	130	778	3050	110	549	394	872	1170
20	878	244	120	130	130	790	2730	130	514	434	1080	1100
21	790	254	120	130	130	997	2440	314	480	420	1140	1100
22	623	231	200	130	130	1030	2130	307	461	394	958	1120
23	119	213	350	130	120	977	1850	225	466	778	890	1090
24	207	201	300	130	120	1030	1610	282	443	878	939	1220
25	416	186	250	120	120	1260	1420	251	425	438	443	1260
26	311	175	200	120	120	2010	1290	210	416	564	690	1020
27	712	178	150	120	120	1310	1290	181	412	801	1140	842
28	1270	167	140	120	120	836	1160	170	429	580	1160	1090
29	656	159	130	120	---	645	1040	369	819	378	915	1190
30	429	149	120	120	---	606	927	307	1300	661	848	1200
31	322	---	110	130	---	1030	---	554	---	884	933	---
TOTAL	17691	6323	5338	4240	4430	18572	61657	12146	17647	20225	27643	34137
MEAN	571	211	172	137	158	599	2055	392	588	652	892	1138
MAX	1270	282	350	210	400	2010	3770	842	1300	1480	1160	1380
MIN	104	149	110	110	120	120	927	110	365	378	443	842

CAL YR 1981 TOTAL 151807 MEAN 416 MAX 2930 MIN 64
WTR YR 1982 TOTAL 230049 MEAN 630 MAX 3770 MIN 104

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1968 to current year.
CHEMICAL DATA: 1958-59 (d), 1970 (b), 1971-74 (d), 1975 (c).
MINOR ELEMENTS DATA: 1971-74 (a).
ORGANIC DATA: OC--1974 (a), 1975 (c).
NUTRIENT DATA: 1971-74 (d), 1975 (c).
BIOLOGICAL DATA:
Bacteria--1971, 1973 (c), 1974 (d), 1975 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-77).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Water temperature is affected by release of water from upstream reservoir. No record Sept. 23 to 29, due to instrument malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-77, 1979-82), 30.5°C July 22, 23, 1972, June 16, 1981; minimum (water years 1968, 1978-82), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 23.0°C June 9, minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.0	9.5	10.0	10.0	8.0	9.0	.5	.0	.0	.0	.0	.0
2	14.0	9.5	11.5	11.5	8.5	9.5	3.5	.0	2.0	.0	.0	.0
3	[illegible]	12.5	13.0	10.5	7.0	8.5	4.0	2.5	3.0	.0	.0	.0
4	[illegible]	12.5	14.0	10.0	5.5	7.5	3.5	2.0	3.0	.0	.0	.0
5	14.5	13.0	14.0	10.0	6.0	8.5	4.0	2.5	3.0	.5	.0	.0
6	14.0	13.5	13.5	10.0	8.0	9.5	2.0	.0	.5	.5	.0	.0
7	13.5	11.5	12.0	7.5	3.5	5.0	2.0	.0	1.0	1.0	.0	.5
8	13.0	11.0	12.0	8.0	3.5	5.5	2.5	1.5	2.0	.5	.0	.0
9	13.0	11.5	12.0	6.0	4.5	5.5	1.5	.0	.5	.0	.0	.0
10	15.0	11.5	13.0	6.0	3.5	4.5	.0	.0	.0	.0	.0	.0
11	15.0	11.0	12.5	6.5	4.5	5.5	.0	.0	.0	.0	.0	.0
12	14.5	10.0	12.0	6.5	3.5	5.0	.5	.0	.0	.0	.0	.0
13	14.5	10.5	12.0	5.5	1.5	3.5	.5	.0	.5	.0	.0	.0
14	14.5	10.0	12.0	7.0	2.5	5.0	.5	.0	.5	.0	.0	.0
15	13.0	10.0	11.5	7.5	6.0	7.0	.5	.0	.5	.0	.0	.0
16	12.0	11.5	11.5	7.5	7.0	7.5	.5	.0	.5	.0	.0	.0
17	14.0	10.5	12.0	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
18	11.0	9.5	10.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
19	11.0	9.5	10.0	8.5	6.0	7.5	.0	.0	.0	.0	.0	.0
20	13.0	10.0	11.5	7.5	7.0	7.5	.0	.0	.0	.0	.0	.0
21	14.0	10.0	11.5	7.0	4.0	5.5	.0	.0	.0	.0	.0	.0
22	13.5	11.0	12.0	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
23	12.5	10.5	12.0	4.0	2.0	3.0	.0	.0	.0	.0	.0	.0
24	10.0	7.5	9.0	4.0	2.5	3.0	.5	.0	.0	.0	.0	.0
25	10.0	7.0	8.5	2.5	1.0	1.5	.5	.0	.0	.0	.0	.0
26	10.5	9.5	10.0	3.5	.5	2.0	.0	.0	.0	.0	.0	.0
27	12.0	10.5	11.0	5.0	3.0	4.0	.0	.0	.0	.0	.0	.0
28	12.0	9.5	11.0	4.5	3.0	4.0	1.0	.0	.5	.0	.0	.0
29	9.5	8.5	9.0	3.0	2.0	2.5	1.5	.5	1.0	.0	.0	.0
30	10.5	8.0	9.0	2.0	.5	1.5	1.0	.0	.5	.0	.0	.0
31	9.5	6.5	8.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	15.5	6.5	11.5	11.5	.5	5.5	4.0	.0	.5	1.0	.0	.0

01426500 WEST BRANCH DELAWARE RIVER AT HALE EDDY, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0	6.5	3.0	5.0	11.0	6.5	8.5
2	.0	.0	.0	.5	.0	.5	7.5	2.5	5.0	11.5	6.0	8.5
3	.0	.0	.0	.5	.0	.0	5.0	2.5	3.5	11.0	5.5	8.5
4	.5	.5	.5	.0	.0	.0	4.0	2.0	3.0	13.0	6.5	9.5
5	.5	.5	.5	.0	.0	.0	4.0	1.5	2.5	15.0	7.0	10.5
6	.5	.5	.5	.5	.0	.0	2.5	1.5	2.0	11.5	8.0	10.0
7	.5	.5	.5	.0	.0	.0	2.5	1.0	1.5	17.5	10.0	13.5
8	.5	.5	.5	.5	.0	.0	4.0	1.5	2.5	13.0	10.0	11.5
9	.5	.5	.5	.0	.0	.0	4.0	1.5	2.5	11.5	10.0	10.5
10	.5	.5	.5	.0	.0	.0	5.0	2.0	3.0	16.0	9.0	12.0
11	.5	.0	.0	.5	.0	.0	4.0	2.0	3.0	16.5	9.0	12.5
12	.0	.0	.0	.0	.0	.0	4.0	2.5	3.0	15.5	10.5	13.0
13	.0	.0	.0	.0	.0	.0	3.5	2.5	3.0	19.0	12.5	15.5
14	.0	.0	.0	.5	.0	.0	6.5	2.5	4.0	20.0	12.5	16.0
15	.0	.0	.0	3.0	.0	1.0	7.0	2.0	4.0	21.0	12.5	17.0
16	.0	.0	.0	2.5	.5	1.5	8.0	3.0	5.0	21.0	13.5	17.5
17	.0	.0	.0	1.5	1.5	1.5	7.5	5.0	6.0	21.5	15.5	18.0
18	.5	.0	.0	6.5	1.5	3.5	6.5	4.0	5.5	21.5	15.5	18.5
19	.0	.0	.0	3.0	2.0	2.5	7.0	3.5	5.0	20.5	15.5	18.0
20	.0	.0	.0	6.5	1.5	3.5	7.0	4.0	5.5	22.5	16.0	19.0
21	.5	.0	.0	3.0	2.0	2.5	6.5	4.0	5.5	17.5	10.0	14.5
22	.5	.0	.0	4.5	1.5	3.0	6.0	3.5	4.5	9.5	8.0	9.0
23	.5	.0	.0	7.0	1.5	4.0	7.5	3.0	5.0	10.0	9.5	9.5
24	.0	.0	.0	6.5	1.0	3.5	9.0	4.0	6.0	11.5	9.5	10.5
25	.5	.0	.0	7.5	2.5	4.5	9.5	4.5	6.5	15.5	11.0	13.5
26	.5	.0	.0	4.5	3.0	3.5	6.5	5.0	6.0	21.5	12.5	17.0
27	.5	.0	.0	3.5	.5	1.5	8.0	5.5	6.5	19.0	15.5	17.5
28	.5	.0	.0	4.5	.0	2.0	10.0	5.0	7.0	17.0	15.0	16.0
29	---	---	---	6.5	.0	3.0	10.5	4.5	7.0	17.0	14.0	15.0
30	---	---	---	8.0	1.5	5.0	12.0	6.0	8.5	18.0	14.5	16.0
31	---	---	---	6.5	4.5	5.0	---	---	---	17.0	15.0	16.0
MONTH	.5	.0	.0	8.0	.0	1.5	12.0	1.0	4.5	22.5	5.5	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.5	15.0	16.0	19.5	15.5	17.0	13.5	7.0	9.5	10.5	8.0	9.0
2	19.5	14.5	17.0	19.0	14.5	16.5	13.0	7.5	10.0	13.0	9.0	10.5
3	16.0	13.5	15.0	16.0	14.5	15.0	13.5	7.5	10.0	11.5	8.0	9.5
4	18.0	13.0	15.5	19.0	14.0	16.0	11.0	8.0	9.5	10.0	8.0	8.5
5	16.0	14.5	15.0	19.5	13.0	16.0	12.5	7.5	9.0	12.0	8.0	9.5
6	14.5	13.5	14.0	20.0	12.5	16.0	10.5	7.0	8.5	13.0	8.0	10.0
7	18.5	13.0	15.5	19.5	11.5	15.0	11.0	7.0	8.5	12.0	8.5	10.0
8	21.0	15.0	17.5	18.0	12.0	15.0	9.0	7.0	8.0	9.5	8.5	9.0
9	23.0	15.5	19.0	17.0	10.0	13.0	12.5	8.0	9.5	12.5	8.5	10.0
10	21.0	17.0	19.0	14.5	7.5	11.0	11.0	7.5	9.0	12.0	8.5	10.0
11	18.5	16.0	17.0	15.0	8.5	12.0	11.0	7.0	8.5	12.5	8.5	10.0
12	18.5	16.0	17.0	19.0	11.5	14.5	12.0	7.0	9.0	12.5	8.5	10.0
13	16.5	12.0	13.5	17.0	9.5	13.0	11.0	7.0	8.5	13.0	9.0	10.5
14	16.5	11.5	13.5	15.5	9.5	12.5	11.5	7.0	8.5	13.0	9.0	10.5
15	15.5	11.0	13.0	17.0	11.0	13.5	13.0	7.0	9.0	10.5	9.5	10.0
16	12.5	11.0	11.5	14.0	8.5	11.5	12.5	7.0	9.0	12.0	9.5	10.5
17	14.5	10.5	12.5	16.0	8.0	11.5	9.5	7.0	8.5	12.0	9.5	10.0
18	17.5	10.0	13.5	18.5	8.5	13.0	12.5	7.0	9.5	11.0	9.5	10.0
19	16.5	10.5	13.0	17.0	10.0	13.5	12.5	7.0	9.5	13.0	9.5	10.5
20	15.0	9.5	12.0	14.0	10.0	11.5	9.0	7.5	8.0	10.5	9.0	10.0
21	15.5	8.5	12.0	18.0	8.5	13.0	10.5	7.0	8.5	12.5	10.0	11.0
22	15.0	8.5	11.5	18.0	8.5	13.0	11.0	7.0	8.5	11.5	10.0	11.0
23	14.0	9.0	11.5	13.5	8.0	10.0	11.5	7.5	9.0	---	---	---
24	15.5	8.0	11.5	14.5	6.5	9.5	12.5	7.5	9.5	---	---	---
25	16.5	8.0	12.0	17.0	7.0	12.0	13.5	7.5	10.5	---	---	---
26	14.0	9.0	11.5	17.0	8.0	11.5	13.5	7.5	10.0	---	---	---
27	13.5	8.5	11.0	12.0	7.0	9.0	10.5	7.5	9.0	---	---	---
28	15.5	9.5	12.0	13.0	7.5	10.0	11.5	7.0	9.0	---	---	---
29	15.0	10.5	12.0	17.0	9.5	13.0	13.0	6.5	9.0	---	---	---
30	19.0	12.5	15.5	13.0	7.5	10.5	12.0	7.5	9.5	15.5	12.0	13.0
31	---	---	---	11.5	7.0	9.0	11.5	7.5	9.0	---	---	---
MONTH	23.0	8.0	14.0	20.0	6.5	13.0	13.5	6.5	9.0	15.5	8.0	10.0

DELAWARE RIVER BASIN

01427207 DELAWARE RIVER AT LORDVILLE, NY

LOCATION.--Lat 41°52'05", long 75°12'50", Delaware County, Hydrologic Unit 02040101, at Lordville-Equinunk Interstate Bridge at Lordville, 50 ft (15 m) downstream from Humphries Brook, and 6.5 mi (10.4 km) southeast of Hancock.

DRAINAGE AREA.--1,590 mi² (4,118 km²), revised.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to August 1971, June 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Feb. 3 to May 13, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-70, 73, 1975-82) 30.5°C June 16, 1976, July 10, 1981; minimum (water years 1968-71, 74, 77, 78, 80-82), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 26.5°C July 19, minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.0	9.5	10.5	9.0	8.0	8.5	1.5	.5	1.0	.0	.0	.0
2	11.0	10.0	10.5	9.5	8.0	8.5	1.5	.5	1.0	.0	.0	.0
3	11.0	10.0	10.5	9.0	8.0	8.5	2.5	1.5	2.0	.0	.0	.0
4	11.5	10.0	11.0	8.0	7.0	7.5	2.5	2.0	2.5	.5	.0	.0
5	12.5	11.5	12.0	8.0	7.0	7.5	3.0	2.5	3.0	.0	.0	.0
6	12.5	12.5	12.5	9.0	8.0	8.5	2.5	.5	1.5	.0	.0	.0
7	12.5	11.0	11.5	8.0	5.0	6.5	1.0	.5	.5	.0	.0	.0
8	11.0	10.0	10.5	5.5	4.5	5.0	1.5	1.0	1.0	.0	.0	.0
9	10.5	10.0	10.0	5.5	5.0	5.5	1.5	.5	.5	.0	.0	.0
10	11.0	9.5	10.0	5.0	4.0	4.5	.5	.0	.5	.0	.0	.0
11	11.5	10.0	11.0	5.0	4.5	5.0	.0	.0	.0	.0	.0	.0
12	11.5	10.0	10.5	5.0	4.5	4.5	.0	.0	.0	.0	.0	.0
13	11.5	10.0	10.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
14	11.5	9.5	10.5	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
15	11.0	10.0	10.5	6.0	4.5	5.0	.0	.0	.0	.0	.0	.0
16	11.0	10.0	10.5	6.5	6.0	6.5	.0	.0	.0	.0	.0	.0
17	10.5	9.5	10.0	7.0	6.5	7.0	.0	.0	.0	.0	.0	.0
18	10.5	9.0	9.5	7.0	6.5	7.0	.0	.0	.0	.0	.0	.0
19	9.0	8.0	8.5	7.0	6.5	6.5	.0	.0	.0	.0	.0	.0
20	9.5	7.5	8.0	7.0	6.5	7.0	.0	.0	.0	.0	.0	.0
21	10.0	8.5	9.5	7.0	5.0	6.0	.0	.0	.0	.0	.0	.0
22	11.0	10.0	10.5	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0
23	11.0	10.0	10.5	4.0	3.0	3.5	.0	.0	.0	.0	.0	.0
24	10.0	8.5	9.0	3.5	3.0	3.5	.0	.0	.0	.0	.0	.0
25	8.5	7.0	7.0	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
26	8.5	7.0	7.5	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
27	10.5	8.0	9.0	3.0	2.0	2.5	.0	.0	.0	.0	.0	.0
28	10.5	10.0	10.5	3.5	3.0	3.5	.0	.0	.0	.0	.0	.0
29	9.5	8.5	9.0	3.0	2.5	3.0	.0	.0	.0	.0	.0	.0
30	8.5	7.5	8.0	2.0	1.5	2.0	.0	.0	.0	.0	.0	.0
31	8.0	7.5	8.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	12.5	7.0	10.0	9.5	1.0	5.5	3.0	.0	.5	.5	.0	.0

01427207 DELAWARE RIVER AT LORDVILLE, NY

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0							---	---	---
2	.0	.0	.0							---	---	---
3	---	---	---							---	---	---
4	---	---	---							---	---	---
5	---	---	---							---	---	---
6	---	---	---							---	---	---
7	---	---	---							---	---	---
8	---	---	---							---	---	---
9	---	---	---							---	---	---
10	---	---	---							---	---	---
11	---	---	---							---	---	---
12	---	---	---							---	---	---
13	---	---	---							---	---	---
14	---	---	---							19.0	15.0	17.0
15	---	---	---							20.0	16.0	18.0
16	---	---	---							20.5	17.0	19.0
17	---	---	---							21.5	18.5	19.5
18	---	---	---							21.5	18.5	20.0
19	---	---	---							21.0	18.5	19.5
20	---	---	---							22.5	19.0	20.5
21	---	---	---							21.5	19.5	20.5
22	---	---	---							20.0	15.5	17.5
23	---	---	---							15.5	12.5	13.5
24	---	---	---							12.5	11.5	12.0
25	---	---	---							16.0	12.5	13.5
26	---	---	---							20.0	14.5	17.0
27	---	---	---							21.0	18.0	19.5
28	---	---	---							20.0	18.5	19.5
29	---	---	---							20.0	17.5	18.5
30	---	---	---							19.0	18.0	18.5
31	---	---	---							18.5	18.0	18.5
MONTH	.5	.0	.0							22.5	11.5	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.0	17.0	17.5	19.5	17.0	18.5	18.0	16.0	17.0	14.0	13.5	13.5
2	20.0	16.5	18.5	19.5	16.5	18.0	19.5	17.0	18.0	17.0	13.5	15.0
3	18.5	16.5	17.5	18.5	16.5	17.5	20.5	17.5	18.5	16.5	14.5	15.5
4	18.0	15.5	17.0	19.5	16.0	17.5	20.5	17.5	19.0	14.5	11.5	12.5
5	18.0	16.0	17.0	21.0	17.0	19.0	20.0	17.0	18.5	13.5	11.0	12.0
6	16.0	15.0	15.5	23.0	19.5	21.0	17.5	15.0	16.0	14.5	12.0	13.5
7	16.5	14.5	15.5	24.0	20.5	22.0	16.5	14.0	15.0	15.0	14.0	14.5
8	18.0	15.0	16.5	25.0	22.0	23.5	16.0	14.0	14.5	14.5	11.5	13.0
9	20.5	16.0	18.5	25.5	22.5	24.0	18.0	14.5	16.0	14.0	11.0	12.5
10	20.0	18.0	19.0	24.5	20.5	22.5	19.0	17.0	18.0	14.5	13.0	14.0
11	19.0	17.0	18.0	22.0	20.0	21.0	17.5	14.5	16.0	14.5	12.0	13.5
12	17.5	16.0	17.0	25.0	20.5	22.5	17.5	13.5	15.0	14.0	12.0	13.5
13	17.0	14.0	15.5	25.0	21.5	23.0	16.5	14.0	15.0	15.0	13.5	14.5
14	16.0	13.0	14.5	24.5	22.0	23.5	14.0	13.0	13.5	17.0	14.5	15.5
15	17.5	15.0	16.5	24.0	21.5	23.0	16.0	13.0	14.5	16.0	14.5	15.0
16	18.5	16.5	17.5	25.0	22.0	23.5	18.0	15.0	16.0	14.5	13.5	14.0
17	18.0	16.5	17.0	24.0	21.0	22.5	16.5	14.0	15.5	14.0	12.5	13.0
18	21.0	17.0	18.5	25.0	21.5	23.5	16.5	13.0	15.0	12.0	10.5	11.5
19	20.5	19.0	19.5	26.5	23.5	25.0	16.0	14.5	15.5	13.0	10.0	11.5
20	20.5	18.0	19.0	25.5	22.5	24.0	15.5	12.5	14.5	12.5	10.5	11.5
21	19.5	17.0	18.0	23.0	19.5	21.5	13.0	11.5	12.0	13.0	10.5	11.5
22	20.5	16.5	18.5	24.5	20.5	22.0	13.0	11.0	12.0	13.0	12.0	12.5
23	19.5	17.5	18.5	24.0	21.5	22.5	15.5	12.5	14.0	13.0	12.0	12.5
24	20.5	17.0	18.5	21.5	16.5	18.5	16.5	13.5	15.0	13.5	12.0	12.5
25	21.5	17.5	19.5	22.0	17.0	19.5	15.5	14.5	15.0	14.0	12.5	13.0
26	21.5	19.0	20.5	24.5	20.5	22.5	19.0	14.0	16.0	13.5	12.5	13.0
27	21.0	19.0	20.0	23.0	17.5	19.5	18.0	13.5	15.5	16.0	13.5	14.5
28	23.0	19.5	21.0	18.5	17.5	17.5	14.5	12.0	13.0	15.5	14.0	14.5
29	22.0	18.5	20.5	21.5	17.0	19.0	13.5	10.5	12.0	15.0	14.0	14.5
30	19.5	17.5	18.5	21.5	19.5	20.5	16.0	12.5	14.0	15.5	14.0	14.5
31	---	---	---	20.5	17.5	18.5	14.5	13.5	14.0	---	---	---
MONTH	23.0	13.0	18.0	26.5	16.0	21.0	20.5	10.5	15.5	17.0	10.0	13.5

01427500 CALLICOON CREEK AT CALLICOON, NY

LOCATION.--Lat 41°45'39", long 75°02'55", Sullivan County, Hydrologic Unit 02040101, on right bank 0.7 mi (1.1 km) southeast of Callicoon, 0.9 mi (1.4 km) upstream from mouth, and 1.0 mi (1.6 km) west of Hortonville.

DRAINAGE AREA.--110 mi² (287 km²), revised.

PERIOD OF RECORD.--August 1940 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Concrete control since July 1944. Datum of gage is 759.84 ft (231.599 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation by small pond above station.

AVERAGE DISCHARGE.--42 years, 177 ft³/s (5.013 m³/s), 21.65 in/yr (550 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Aug. 17, 1947, gage height, 9.68 ft (2.950 m), from rating curve extended above 5,100 ft³/s (144 m³/s) on basis of slope-area measurement of peak flow, minimum, 4.0 ft³/s (0.11 m³/s) July 26, 27, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 3,080 ft³/s (87.2 m³/s) Apr. 3, gage height, 5.10 ft (1.554 m), only peak above base of 2,200 ft³/s (62.3 m³/s), minimum, 11 ft³/s (0.312 m³/s) Sept. 14, 17, 18, 19, 20, gage height, 1.08 ft (0.329 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	92	70	90	300	86	1080	174	64	51	26	18
2	53	79	297	86	400	80	662	159	214	44	25	20
3	37	68	270	84	700	66	1150	150	126	42	28	24
4	29	61	194	500	900	42	1340	139	93	42	28	20
5	24	56	165	786	520	80	626	123	76	38	43	18
6	27	114	141	406	400	88	483	113	159	42	30	16
7	49	140	129	296	280	86	388	109	477	42	26	15
8	41	124	119	230	230	84	333	98	232	34	25	15
9	36	106	114	200	180	82	288	98	161	30	43	15
10	30	87	101	123	130	100	284	87	123	30	37	14
11	26	78	91	90	120	120	310	77	109	26	30	13
12	24	72	83	88	120	210	297	76	95	53	25	12
13	22	65	76	84	130	390	301	77	183	42	24	12
14	21	62	74	82	120	500	348	70	259	33	22	11
15	20	65	76	80	110	483	306	64	161	30	21	12
16	19	68	78	78	120	420	284	60	131	28	20	13
17	19	88	76	76	130	398	353	57	139	26	20	11
18	20	85	64	100	120	454	1190	53	113	24	22	11
19	28	80	56	110	110	619	520	53	95	23	19	11
20	26	146	54	100	110	670	378	51	89	34	20	11
21	23	191	64	100	100	738	310	48	77	31	23	13
22	21	139	78	100	98	762	255	47	69	25	20	13
23	27	113	130	110	92	828	217	54	85	24	20	15
24	58	103	170	120	95	862	193	62	67	21	19	15
25	44	93	150	98	86	1060	171	60	57	20	28	13
26	53	82	130	96	82	1460	228	51	54	20	28	13
27	138	86	120	94	78	819	398	46	51	20	22	15
28	551	82	110	94	80	507	301	43	50	48	20	15
29	232	75	100	96	---	415	228	69	65	37	16	13
30	148	69	96	98	---	415	193	65	74	29	15	13
31	110	---	96	150	---	715	---	62	---	25	15	---
TOTAL	1976	2769	3572	4845	5941	13639	13415	2495	3748	1014	760	430
MEAN	63.7	92.3	115	156	212	440	447	80.5	125	32.7	24.5	14.3
MAX	551	191	297	786	900	1460	1340	174	477	53	43	24
MIN	19	56	54	76	78	42	171	43	50	20	15	11
CFSM	.58	.84	1.05	1.42	1.93	4.00	4.06	.73	1.14	.30	.22	.13
IN.	.67	.94	1.21	1.64	2.01	4.61	4.54	.84	1.27	.34	.26	.15

CAL YR 1981 TOTAL 50194.0 MEAN 138 MAX 3300 MIN 9.2 CFSM 1.26 IN 16.97
WTR YR 1982 TOTAL 54604.0 MEAN 150 MAX 1460 MIN 11 CFSM 1.36 IN 18.47

01427510 DELAWARE RIVER AT CALLICOON, NY

LOCATION.--Lat 41°45'24", long 75°03'30", Wayne County, Pennsylvania, Hydrologic Unit 02040101, on right bank, 0.5 mi (0.8 km) downstream from Callicoon Creek, 0.5 mi (0.8 km) downstream from Interstate Bridge 7, and 0.8 mi (1.3 km) southeast of Callicoon. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,820 mi^2 (4,714 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (229 m), from topographic map (nearest 20 ft).

REMARKS.--Records good except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi^2 (961 km^2) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi^2 (1,176 km^2) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during period of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,300 ft^3/s (2,132 m^3/s) Feb. 12, 1981, result of ice jam release, gage height, 13.19 ft (4.020 m), minimum 335 ft^3/s (9.49 m^3/s) Sept. 13, 1977, gage height, 2.20 ft (0.671 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,500 ft^3/s (693.8 m^3/s) Apr. 4, gage height, 7.86 ft (2.396 m); maximum gage height, 10.96 ft (3.341 m) Feb. 4 (ice jam); minimum discharge, 467 ft^3/s (13.2 m^3/s) Oct. 1, gage height, 2.40 ft (0.732 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	2380	944	880	600	1000	12400	3240	1740	3530	1160	1250
2	614	2010	1530	880	800	1000	10300	3060	2220	2950	977	1260
3	1330	1690	2090	900	1800	980	9480	2870	2470	2540	897	1480
4	1270	1400	1920	1300	8000	920	19600	2710	1990	2240	852	1700
5	1100	1240	1710	5000	6000	900	12300	2470	1800	1920	1030	1680
6	960	1330	1550	4230	4200	880	9620	2250	2060	1610	1230	1590
7	977	1920	1300	3410	3400	1100	7810	2110	3830	1370	1430	1320
8	1330	1820	1200	2600	3000	1100	7030	1850	3450	1210	1510	1260
9	1270	1630	1100	2000	2600	1000	5660	1660	2740	1080	1300	1400
10	1380	1530	1000	1400	2200	940	5000	1630	2360	1070	1240	1450
11	1240	1430	1000	1200	1900	940	4820	1450	2110	1070	1200	1690
12	1040	1310	980	1150	1800	1100	4500	1310	1960	1030	1150	1660
13	1120	1220	960	1100	1850	1500	4260	1220	2090	1140	1150	1450
14	1080	1160	920	1150	1900	3000	4570	1120	3000	1000	1370	1210
15	1080	1220	900	1200	1700	4500	4680	960	2500	1030	1310	1140
16	1160	1160	880	950	1700	4200	4780	851	2040	994	1060	1210
17	1330	1200	880	850	1800	4000	5840	780	2040	1090	1180	1420
18	1080	1240	860	760	1700	4400	14200	726	2060	1060	1190	1690
19	866	1200	820	720	1600	5600	10600	678	1770	840	1180	1610
20	1290	1380	800	670	1450	6000	8080	667	1600	839	1100	1340
21	1220	1920	820	640	1500	7360	6810	689	1430	928	1490	1330
22	1180	1850	900	600	1400	6610	5940	851	1310	808	1360	1350
23	897	1580	1200	580	1300	5940	5310	822	1380	752	1140	1410
24	766	1430	2000	560	1250	6260	5140	928	1350	1200	1140	1350
25	1180	1330	1700	550	1150	7320	4780	1040	1170	1030	1150	1580
26	1240	1220	1300	540	1100	12600	4500	944	1100	689	717	1530
27	1960	1180	1200	640	1050	10400	5450	822	1050	993	1140	1170
28	8000	1180	1100	600	1000	6570	5030	752	1050	1160	1450	1110
29	6470	1100	1000	580	---	5240	4190	851	1710	928	1370	1450
30	4260	1010	920	570	---	4710	3560	1220	4290	766	1020	1460
31	3060	---	900	580	---	5940	---	1270	---	1060	1100	---
TOTAL	52271	43270	36384	38790	59750	124010	216240	43801	61670	39927	36593	42550
MEAN	1686	1442	1174	1251	2134	4000	7208	1413	2056	1288	1180	1418
MAX	8000	2380	2090	5000	8000	12600	19600	3240	4290	3530	1510	1700
MIN	521	1010	800	540	600	880	3560	667	1050	689	717	1110

CAL YR 1981 TOTAL 659429 MEAN 1807 MAX 31400 MIN 433
WTR YR 1982 TOTAL 795256 MEAN 2179 MAX 19600 MIN 521

NOTE.--No gage-height record Feb. 11 to Mar. 22.

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: June 1975 to current year.

INSTRUMENTATION.--Temperature recorder since June 1975.

REMARKS.--No record Feb. 18 to Mar. 31, Sept. 12-21, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976-82), 29.5°C Aug. 7-9, 1980; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 28.0°C July 18, 19; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	11.0	10.0	10.5	9.0	7.5	8.0	1.0	.0	.0	1.0	1.0	1.0
2	11.5	10.0	10.5	10.0	8.0	8.5	1.5	.0	.5	1.0	1.0	1.0
3	10.5	9.5	10.0	9.5	7.5	8.5	2.0	1.0	1.5	1.0	1.0	1.0
4	12.0	9.5	10.5	9.0	6.5	7.5	2.5	1.5	2.0	1.0	1.0	1.0
5	12.5	11.0	11.5	9.0	6.5	7.5	3.0	2.0	2.5	1.0	1.0	1.0
6	13.0	12.0	12.5	9.0	7.5	8.0	1.5	.0	1.0	1.0	1.0	1.0
7	12.5	11.0	11.5	7.5	5.0	6.5	1.0	.0	.5	1.0	1.0	1.0
8	11.5	10.0	10.5	6.0	4.0	5.0	1.5	.5	1.0	1.0	1.0	1.0
9	11.0	9.5	10.0	5.5	4.0	4.5	1.0	.0	.0	1.0	1.0	1.0
10	11.5	8.5	10.0	4.5	3.5	4.0	.0	.0	.0	1.0	1.0	1.0
11	12.0	9.0	10.5	5.5	4.0	4.5	.5	.0	.0	1.0	1.0	1.0
12	12.0	9.0	10.5	4.5	3.0	4.0	.5	.0	.5	1.0	1.0	1.0
13	12.5	9.0	10.5	4.0	2.0	3.0	.5	.0	.5	1.0	1.0	1.0
14	12.5	9.0	10.5	5.0	2.5	3.5	.5	.5	.5	1.0	1.0	1.0
15	12.0	9.0	10.5	5.5	4.0	5.0	.5	.5	.5	1.0	1.0	1.0
16	11.0	10.0	10.5	6.5	5.5	6.0	.5	.5	.5	1.0	1.0	1.0
17	11.5	8.5	10.0	7.5	6.5	7.0	.5	.5	.5	1.0	1.0	1.0
18	10.0	8.5	9.0	7.0	6.5	7.0	.5	.5	.5	1.0	1.0	1.0
19	9.0	7.5	8.5	7.5	6.0	7.0	.5	.5	.5	1.0	1.0	1.0
20	9.0	6.5	8.0	7.5	6.5	7.0	.5	.5	.5	1.0	.5	1.0
21	10.5	7.0	8.5	7.0	5.0	6.0	.5	.5	.5	1.0	.5	.5
22	11.5	8.5	10.0	5.0	3.5	4.5	.5	.5	.5	1.0	.5	.5
23	11.0	10.0	11.0	3.5	2.5	3.0	.5	.5	.5	.5	.5	.5
24	10.0	8.0	9.0	3.0	2.0	2.5	1.0	.5	.5	.5	.5	.5
25	8.0	6.0	7.0	2.0	1.0	1.5	.5	.5	.5	.5	.5	.5
26	8.0	7.0	7.5	1.5	.0	1.0	1.0	.5	.5	.5	.5	.5
27	10.5	8.0	9.0	3.0	1.5	2.0	1.0	.5	.5	.5	.5	.5
28	12.0	10.5	11.0	3.0	2.5	2.5	1.0	.5	.5	.5	.5	.5
29	10.0	8.5	9.0	2.5	1.5	2.0	1.0	.5	1.0	.5	.5	.5
30	8.5	8.0	8.5	1.5	.5	1.0	1.0	1.0	1.0	.5	.5	.5
31	9.0	8.0	8.0	---	---	---	1.0	1.0	1.0	.5	.5	.5
MONTH	13.0	6.0	10.0	10.0	.0	5.0	3.0	.0	.5	1.0	.5	1.0

01427510 DELAWARE RIVER AT CALLICOON, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5				4.5	4.5	4.5	13.0	11.5	12.0
2	.5	.5	.5				4.5	4.5	4.5	14.0	11.0	12.5
3	.5	.5	.5				4.5	4.0	4.5	13.5	11.5	12.5
4	.5	.5	.5				4.0	3.0	3.5	13.5	11.5	12.5
5	.5	.5	.5				3.0	2.0	2.0	15.5	11.5	13.5
6	.5	.5	.5				2.5	1.0	2.0	14.0	12.5	13.5
7	.5	.5	.5				1.0	1.0	1.0	17.0	13.0	15.0
8	.5	.5	.5				1.5	1.0	1.0	15.5	14.0	15.0
9	.5	.5	.5				2.5	1.5	2.0	15.0	14.0	14.5
10	.5	.5	.5				4.5	2.5	3.5	16.5	12.5	14.5
11	.0	.0	.0				4.5	4.5	4.5	18.0	13.0	15.5
12	.0	.0	.0				4.5	4.0	4.5	18.5	14.5	16.5
13	.0	.0	.0				4.0	4.0	4.0	20.0	16.5	18.5
14	.0	.0	.0				6.5	4.0	5.5	21.5	16.5	19.0
15	.0	.0	.0				8.0	6.0	7.0	22.5	17.0	19.5
16	.0	.0	.0				9.5	7.0	8.0	22.5	18.0	20.5
17	.0	.0	.0				9.0	9.0	9.0	23.0	19.5	21.0
18	---	---	---				9.0	7.0	8.5	22.5	19.5	21.0
19	---	---	---				7.5	6.5	7.0	22.0	19.5	21.0
20	---	---	---				9.0	7.5	8.0	23.5	20.0	22.0
21	---	---	---				10.0	9.0	9.5	22.5	20.0	21.5
22	---	---	---				9.0	7.5	8.0	21.0	18.0	19.0
23	---	---	---				8.0	6.5	7.5	17.5	14.5	16.0
24	---	---	---				10.5	8.0	9.0	14.5	13.5	13.5
25	---	---	---				12.0	9.5	11.0	17.0	13.5	15.0
26	---	---	---				11.0	10.5	11.0	21.0	15.0	18.0
27	---	---	---				11.5	10.0	11.0	21.5	18.0	20.0
28	---	---	---				12.0	10.5	11.0	21.5	19.5	20.0
29	---	---	---				12.5	10.0	11.5	21.5	18.5	19.5
30	---	---	---				13.5	10.5	12.0	21.0	19.5	19.5
31	---	---	---				---	---	---	19.5	19.0	19.0
MONTH	.5	.0	.5				13.5	1.0	6.5	23.5	11.0	17.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	18.5	19.0	20.0	17.5	18.5	23.0	21.0	22.0	18.0	15.5	17.0
2	20.5	17.0	19.0	20.5	17.0	18.5	22.5	19.5	21.0	18.5	15.0	16.5
3	19.5	18.0	18.5	18.0	17.5	17.5	23.0	20.0	21.5	18.0	15.5	17.0
4	19.5	17.0	18.5	19.5	16.0	17.5	24.0	21.0	22.0	18.5	16.5	17.5
5	18.5	17.5	17.5	22.5	17.0	19.5	24.0	17.0	21.0	19.0	16.5	18.0
6	17.0	16.0	16.5	24.0	19.0	21.5	21.0	19.0	20.0	18.5	17.5	18.0
7	16.5	15.0	16.0	25.5	20.5	23.0	20.0	17.0	19.0	18.5	15.0	17.0
8	18.0	15.5	16.5	26.0	22.5	24.5	19.5	17.0	18.5	16.0	13.5	15.0
9	21.0	16.0	18.5	26.5	22.5	24.5	20.0	16.0	18.5	14.0	12.0	13.0
10	21.0	18.0	19.5	27.0	22.0	24.5	18.5	15.5	17.5	14.5	12.0	13.5
11	19.5	18.5	18.5	24.5	23.0	23.0	19.5	16.0	18.0	12.0	12.0	12.0
12	18.5	17.0	17.5	25.5	22.0	23.5	20.5	17.0	19.5	---	---	---
13	17.5	14.5	16.0	26.0	21.5	24.0	20.0	14.0	18.0	---	---	---
14	15.5	14.0	14.5	26.5	22.5	24.5	19.5	15.0	17.0	---	---	---
15	18.5	15.0	16.5	27.0	23.0	25.0	20.5	17.5	18.5	---	---	---
16	18.5	17.0	17.5	27.0	23.5	25.5	19.5	16.0	17.5	---	---	---
17	19.5	18.0	18.5	27.5	24.0	26.0	20.0	18.0	19.0	---	---	---
18	22.0	17.5	19.5	28.0	24.0	26.0	19.5	16.5	18.0	---	---	---
19	22.5	19.0	20.5	28.0	24.5	26.5	18.0	13.5	15.5	---	---	---
20	21.0	18.5	20.0	27.0	24.5	25.0	17.5	14.5	16.0	---	---	---
21	21.5	18.0	20.0	26.0	22.0	24.5	18.0	15.5	17.0	---	---	---
22	22.0	17.5	20.0	26.0	22.0	23.5	18.5	17.0	18.0	14.0	13.0	13.5
23	20.0	18.0	19.0	25.5	22.5	24.5	17.5	16.0	16.5	14.5	14.0	14.0
24	22.0	17.0	19.5	26.5	22.0	24.5	19.5	17.5	18.5	15.5	13.5	14.5
25	23.0	17.5	20.5	24.0	21.0	22.5	20.0	16.0	18.0	16.0	14.0	15.0
26	22.0	19.5	21.0	25.0	22.0	23.5	16.0	13.5	15.0	15.5	14.0	14.5
27	22.5	20.0	21.0	25.5	22.5	24.5	16.5	14.0	15.5	16.0	14.5	15.5
28	24.5	20.5	22.5	24.0	20.5	22.0	18.0	15.5	17.0	17.0	15.0	16.0
29	23.0	20.0	22.0	22.5	19.0	21.0	18.5	16.0	17.0	17.0	15.5	16.5
30	20.0	18.5	19.5	22.5	20.0	21.5	16.0	14.5	15.5	17.0	15.0	16.0
31	---	---	---	24.5	21.5	23.0	17.0	14.5	15.5	---	---	---
MONTH	24.5	14.0	19.0	28.0	16.0	23.0	24.0	13.5	18.0	19.0	12.0	15.5

DELAWARE RIVER BASIN

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY

LOCATION.--Lat 41°30'31", long 74°59'11", Sullivan County, Hydrologic Unit 02040101, on left bank 1.6 mi (2.6 km) upstream from Lackawaxen River, and 4.6 mi (7.4 km) northwest of Barryville. Water-quality sampling site at discharge station.

DRAINAGE AREA.--2,020 mi² (5,240 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 600.22 ft (182.947 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except those for winter periods, which are poor. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir (see Reservoirs in Delaware River Basin), and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow of these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130,000 ft³/s (3,680 m³/s) Aug. 19, 1955, gage height, 26.40 ft (8.047 m) from floodmarks in gage house, from rating curve extended above 55,000 ft³/s (1,560 m³/s) on basis of slope-area measurement at gage height 23.19 ft (7.068 m); minimum, 122 ft³/s (3.46 m³/s) Sept. 5, 1953, gage height, 1.11 ft (0.338 m); minimum daily, 126 ft³/s (3.57 m³/s) Sept. 4, 1953.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,200 ft³/s (770 m³/s) Apr. 4, gage height, 10.67 ft (3.252 m), maximum gage height, 13.52 ft (4.121 m) Feb. 4 (ice jam), minimum discharge, 464 ft³/s (13.14 m³/s) Oct. 1, gage height, 2.09 ft (0.637 m), minimum daily, 487 ft³/s (13.79 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	487	2540	1150	940	1100	1280	13400	3510	1610	3620	1250	1220
2	630	2140	1460	920	2000	1130	12700	3340	2210	3080	1130	1300
3	1020	1850	2300	920	3000	1170	10100	3170	2720	2700	982	1380
4	1400	1610	2220	1300	10000	1160	22400	2970	2210	2380	921	1650
5	1290	1420	1960	5400	8000	1040	15100	2730	1990	2080	929	1640
6	1150	1420	1700	5220	6200	912	11500	2520	2030	1780	1160	1640
7	947	1890	1500	3800	4000	1320	9200	2360	3500	1570	1450	1400
8	1330	2010	1400	2500	3200	1250	7420	2160	3850	1350	1510	1310
9	1380	1770	1300	1900	2700	1330	6420	1920	3020	1220	1410	1370
10	1440	1700	1200	1600	2300	1100	5520	1810	2570	1160	1350	1430
11	1390	1580	1200	1400	2000	960	5320	1760	2290	1190	1220	1620
12	1220	1490	1100	1300	1800	1440	4970	1580	2100	1100	1270	1660
13	1150	1400	1100	1200	1800	2590	4610	1470	2150	1200	1110	1480
14	1200	1320	1000	1300	1800	3940	4920	1380	3340	1160	1350	1390
15	1160	1360	1000	1400	1700	5100	5020	1240	2990	1010	1390	1190
16	1200	1320	970	1200	1800	4790	5020	1100	2350	1110	1200	1120
17	1370	1320	930	1000	1960	4240	5880	986	2240	1110	1130	1310
18	1310	1380	900	920	1910	4270	15300	913	2310	1090	1260	1610
19	1030	1330	850	840	1760	5640	13400	839	2030	1000	1210	1630
20	1120	1420	830	790	1510	6040	9640	805	1820	956	1190	1430
21	1410	2000	810	750	1610	7430	7920	808	1670	1000	1350	1360
22	1260	2050	900	700	1560	7880	6760	885	1530	956	1460	1350
23	1220	1810	1200	680	1530	7740	5750	1070	1570	830	1290	1410
24	807	1650	2000	660	1480	7690	5450	1020	1570	1010	1140	1410
25	1120	1540	2100	640	1350	8690	5040	1180	1400	1250	1270	1480
26	1360	1420	1700	700	1130	14400	4700	1160	1280	876	964	1530
27	1570	1340	1400	760	1070	13800	5760	986	1210	728	874	1350
28	7060	1350	1200	720	1210	8370	5730	871	1180	1310	1440	1140
29	7440	1300	1100	680	---	6200	4680	937	1280	1220	1450	1340
30	4400	1220	1000	660	---	5270	3920	1210	3640	870	1230	1470
31	3190	---	970	820	---	6130	---	1370	---	949	1080	---
TOTAL	54061	47950	40450	43620	71480	144302	243550	50060	65660	42865	37970	42620
MEAN	1744	1598	1305	1407	2553	4655	8118	1615	2189	1383	1225	1421
MAX	7440	2540	2300	5400	10000	14400	22400	3510	3850	3620	1510	1660
MIN	487	1220	810	640	1070	912	3920	805	1180	728	874	1120

CAL YR 1981 TOTAL 746999 MEAN 2047 MAX 33800 MIN 362
WTR YR 1982 TOTAL 884588 MEAN 2423 MAX 22400 MIN 487

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.
CHEMICAL DATA: 1971-73 (a).
NUTRIENT DATA: 1971 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to current year (no winter record for water years 1969-76).

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--No record Feb. 15-17, Mar. 9-30, July 8 to Aug. 3, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-75, 1980-81), 32.0°C Aug. 2, 3 1975, July 10, 1981; minimum (water years 1968, 1977-82), freezing point on many days during winter periods, each year except water years 1980-82.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, 0.5°C on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.5	11.5	12.0	9.5	9.0	9.0	1.5	.5	1.0	.5	.5	.5
2	12.5	11.0	11.5	10.0	8.5	9.0	1.0	.5	.5	.5	.5	.5
3	11.0	10.5	10.5	10.0	8.5	9.0	1.5	1.0	1.0	.5	.5	.5
4	12.5	10.0	11.0	10.0	8.0	9.0	1.5	1.5	1.5	.5	.5	.5
5	12.5	11.0	11.5	10.0	7.5	8.5	2.5	1.5	2.0	.5	.5	.5
6	12.5	12.0	12.0	9.0	8.5	8.5	2.5	1.0	1.5	.5	.5	.5
7	13.0	11.0	11.5	8.5	6.5	7.5	1.0	.5	.5	.5	.5	.5
8	11.5	10.5	11.0	7.0	5.5	6.0	1.0	1.0	1.0	.5	.5	.5
9	11.0	10.0	10.5	6.0	5.5	5.5	1.0	.5	.5	.5	.5	.5
10	12.5	9.5	10.5	5.5	4.5	5.0	.5	.5	.5	.5	.5	.5
11	12.5	9.5	11.0	6.0	5.0	5.5	.5	.5	.5	.5	.5	.5
12	13.0	9.5	11.0	5.5	4.5	5.0	.5	.5	.5	.5	.5	.5
13	13.0	9.5	11.5	5.0	3.5	4.0	.5	.5	.5	.5	.5	.5
14	13.5	10.0	11.5	4.5	3.5	4.0	.5	.5	.5	.5	.5	.5
15	13.0	10.0	11.0	5.0	4.5	4.5	.5	.5	.5	.5	.5	.5
16	12.0	10.5	11.0	6.0	5.0	5.5	.5	.5	.5	.5	.5	.5
17	12.5	9.5	11.0	7.0	6.0	6.5	.5	.5	.5	.5	.5	.5
18	10.0	9.5	9.5	7.0	7.0	7.0	.5	.5	.5	.5	.5	.5
19	10.0	8.0	9.0	8.0	7.0	7.5	.5	.5	.5	.5	.5	.5
20	11.0	7.5	9.0	8.0	7.5	7.5	.5	.5	.5	.5	.5	.5
21	11.0	8.0	9.0	7.5	6.0	7.0	.5	.5	.5	.5	.5	.5
22	11.0	8.5	10.0	6.0	5.0	5.5	.5	.5	.5	.5	.5	.5
23	11.0	10.5	10.5	4.5	3.5	4.0	.5	.5	.5	.5	.5	.5
24	11.0	9.0	10.0	3.5	2.5	3.5	.5	.5	.5	.5	.5	.5
25	9.0	7.5	8.5	2.5	2.0	2.5	.5	.5	.5	.5	.5	.5
26	8.5	8.5	8.5	2.0	1.0	1.5	.5	.5	.5	.5	.5	.5
27	9.5	8.5	9.0	4.0	2.0	2.5	.5	.5	.5	.5	.5	.5
28	11.0	9.5	10.5	3.0	3.0	3.0	.5	.5	.5	.5	.5	.5
29	11.0	9.5	10.0	3.0	2.5	3.0	.5	.5	.5	.5	.5	.5
30	9.5	9.0	9.0	2.5	1.5	2.0	.5	.5	.5	.5	.5	.5
31	9.0	8.5	9.0	---	---	---	.5	.5	.5	.5	.5	.5
MONTH	13.5	7.5	10.5	10.0	1.0	5.5	2.5	.5	.5	.5	.5	.5

01428500 DELAWARE RIVER ABOVE LACKAWAXEN RIVER NEAR BARRYVILLE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	1.5	1.5	1.5	7.5	7.5	7.5	15.0	14.0	14.5
2	.5	.5	.5	2.0	2.0	2.0	8.0	7.0	7.5	16.0	14.0	15.0
3	.5	.5	.5	2.0	2.0	2.0	7.5	7.0	7.0	16.0	14.5	15.0
4	.5	.5	.5	2.0	2.0	2.0	7.0	5.5	6.0	16.5	14.5	15.0
5	.5	.5	.5	2.0	2.0	2.0	5.5	4.0	5.0	17.0	14.0	15.5
6	.5	.5	.5	2.0	2.0	2.0	5.0	3.5	4.5	17.0	15.0	16.0
7	.5	.5	.5	2.0	2.0	2.0	3.5	3.0	3.0	19.0	15.5	17.0
8	.5	.5	.5	2.0	2.0	2.0	3.5	3.0	3.0	17.5	16.5	17.0
9	.5	.5	.5	---	---	---	5.0	3.5	4.0	17.5	16.0	16.5
10	.5	.5	.5	---	---	---	6.5	4.5	5.5	18.5	15.0	16.5
11	.5	.5	.5	---	---	---	7.0	6.5	6.5	19.5	15.0	17.0
12	.5	.5	.5	---	---	---	7.0	6.5	7.0	19.5	16.0	18.0
13	.5	.5	.5	---	---	---	7.0	6.5	6.5	22.0	17.5	19.5
14	.5	.5	.5	---	---	---	8.5	6.5	7.5	23.0	18.5	20.5
15	---	---	---	---	---	---	10.0	8.0	9.0	24.0	18.5	21.0
16	---	---	---	---	---	---	11.5	9.5	10.5	24.5	19.5	22.0
17	---	---	---	---	---	---	12.5	11.5	12.0	25.5	21.0	23.0
18	1.0	1.0	1.0	---	---	---	12.5	10.0	11.5	24.0	21.0	22.5
19	1.0	1.0	1.0	---	---	---	10.5	9.0	9.5	23.5	20.5	22.5
20	1.5	1.0	1.0	---	---	---	11.5	10.0	10.5	25.5	21.0	23.0
21	1.5	1.0	1.0	---	---	---	12.5	11.5	12.0	24.0	21.5	22.5
22	2.0	1.0	1.5	---	---	---	12.0	10.5	11.0	22.0	19.5	21.0
23	1.5	1.5	1.5	---	---	---	11.0	9.0	10.0	19.5	17.0	18.0
24	1.5	1.5	1.5	---	---	---	12.5	10.0	11.0	17.0	16.0	16.5
25	1.5	1.5	1.5	---	---	---	14.0	12.0	13.0	19.0	15.5	17.0
26	1.5	1.5	1.5	---	---	---	14.0	13.0	13.5	22.0	16.0	19.0
27	1.5	1.5	1.5	---	---	---	13.5	13.0	13.5	22.0	18.5	20.5
28	1.5	1.5	1.5	---	---	---	14.0	13.0	13.5	21.5	20.0	20.5
29	---	---	---	---	---	---	14.5	12.5	13.5	23.5	19.5	21.0
30	---	---	---	---	---	---	15.0	13.5	14.0	22.0	20.5	21.0
31	---	---	---	7.5	7.5	7.5	---	---	---	21.0	20.5	20.5
MONTH	2.0	.5	1.0	7.5	1.5	2.5	15.0	3.0	9.0	25.5	14.0	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	20.0	20.0	20.5	19.0	19.5	---	---	---	19.0	18.5	19.0
2	21.5	19.0	20.0	19.5	18.0	19.0	---	---	---	21.5	18.5	20.0
3	20.5	19.0	19.5	20.5	17.5	18.5	---	---	---	22.5	19.5	20.5
4	20.5	19.0	19.5	22.0	18.0	20.0	25.0	22.0	23.5	19.5	18.0	18.5
5	19.5	18.5	19.0	24.5	20.0	22.0	27.5	23.0	25.0	20.0	16.5	18.5
6	18.0	17.5	17.5	26.0	21.5	23.5	26.0	23.0	24.5	20.0	16.5	18.0
7	17.0	16.5	17.0	28.5	23.0	25.5	25.0	22.5	24.0	19.5	17.0	18.0
8	18.0	16.5	17.0	---	---	---	23.0	21.5	22.0	18.5	17.5	18.0
9	21.0	17.5	19.0	---	---	---	23.5	20.5	21.5	20.0	16.5	18.0
10	20.5	19.5	20.0	---	---	---	23.5	20.5	22.0	20.5	17.0	18.5
11	20.0	19.0	19.5	---	---	---	21.5	20.5	21.0	21.0	17.0	19.0
12	19.5	18.0	18.5	---	---	---	23.5	19.5	21.0	21.0	17.5	19.5
13	18.0	16.0	17.0	---	---	---	23.0	19.0	21.0	21.0	17.5	19.5
14	16.5	15.0	16.0	---	---	---	22.0	19.0	20.5	21.0	18.5	19.5
15	18.0	15.5	17.0	---	---	---	22.5	18.0	20.0	20.0	18.5	19.0
16	20.0	17.5	18.5	---	---	---	23.0	18.5	20.5	21.0	19.0	19.5
17	20.5	18.5	19.5	---	---	---	23.0	20.0	21.5	19.5	17.5	18.0
18	23.0	19.0	21.0	---	---	---	24.0	20.0	22.0	17.0	15.0	16.0
19	23.0	20.5	21.5	---	---	---	23.5	19.5	21.5	17.0	14.0	15.5
20	22.0	19.5	21.0	---	---	---	22.0	19.5	20.5	14.5	13.5	13.5
21	22.5	19.0	20.5	---	---	---	21.5	18.5	20.0	14.0	13.0	13.5
22	23.5	19.5	21.0	---	---	---	20.0	17.0	18.0	13.5	13.5	13.5
23	22.0	20.0	21.0	---	---	---	20.0	16.5	18.0	15.5	13.5	14.5
24	22.5	19.0	20.5	---	---	---	22.0	17.5	20.0	16.0	14.0	15.0
25	23.5	19.0	21.0	---	---	---	22.0	19.0	20.0	17.0	14.0	15.5
26	24.0	20.0	22.0	---	---	---	23.0	18.0	20.5	16.5	14.5	15.5
27	24.0	21.5	22.5	---	---	---	21.5	19.5	20.0	17.5	15.0	16.0
28	25.5	21.5	23.5	---	---	---	21.5	18.0	19.5	18.0	15.0	16.5
29	23.0	21.0	22.0	---	---	---	20.5	16.5	18.5	17.5	15.5	16.5
30	20.5	19.5	20.0	---	---	---	20.0	16.0	18.0	18.5	16.0	17.0
31	---	---	---	---	---	---	20.0	17.0	18.5	---	---	---
MONTH	25.5	15.0	19.5	28.5	17.5	21.0	27.5	16.0	21.0	22.5	13.0	17.5

01432160 DELAWARE RIVER AT BARRYVILLE, NY

LOCATION.--Lat 41°28'31", long 74°54'46", Pike County, Pa. Hydrologic Unit 02040104, at Shohola-Barryville Bridge at Barryville, just upstream from Halfway Brook, and 1,000 ft (305 m) upstream from Shohola Brook.

DRAINAGE AREA.--2,659 mi² (6,887 km²), revised.

PERIOD OF RECORD.--Water years 1958, 1968 to current year.
CHEMICAL DATA: 1958 (d), 1969 (a), 1973 (b), 1974 (d), 1975 (b).
NUTRIENT DATA: 1973 (b), 1974 (d), 1975 (b).
BIOLOGICAL DATA:
Bacteria.--1973 (b), 1974 (d), 1975 (b).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1967 to September 1973, March 1975 to current year.

INSTRUMENTATION.--Temperature recorder since October 1967.

REMARKS.--Unpublished records of daily temperatures for May to September 1964-66 are available in files of the Geological Survey. Temperature probe may be influenced by solar radiation during periods of low flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1968-73, 1976-78, 1980-82), 32.0°C July 20, 21, 1980, minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 31.5°C July 18, 19; minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	12.0	12.5	9.0	8.5	8.5	1.5	.0	.5	.5	.0	.0
2	14.5	12.5	13.0	10.0	8.0	9.0	1.0	.0	.5	.5	.0	.0
3	12.5	10.0	11.5	10.0	8.5	9.0	2.0	1.0	1.5	.0	.0	.0
4	11.5	9.5	10.5	9.5	7.5	8.5	2.0	1.5	1.5	.5	.0	.0
5	12.0	11.0	11.5	10.0	8.5	9.0	2.5	2.0	2.0	.0	.0	.0
6	12.0	11.5	12.0	9.5	9.0	9.5	2.5	1.0	1.5	.0	.0	.0
7	12.5	10.0	11.5	9.0	6.0	7.5	1.0	.0	.5	.5	.0	.5
8	10.5	10.0	10.0	6.0	5.0	6.0	1.0	1.0	1.0	.0	.0	.0
9	10.5	9.5	10.0	6.0	5.0	5.5	1.0	.5	1.0	.0	.0	.0
10	10.5	9.0	10.0	6.0	4.5	4.5	.5	.0	.0	.0	.0	.0
11	10.5	9.0	10.0	7.0	5.5	6.5	.0	.0	.0	.0	.0	.0
12	11.0	9.0	10.0	7.0	5.0	5.5	.0	.0	.0	.0	.0	.0
13	11.0	9.0	10.0	6.0	4.0	5.0	.5	.0	.5	.0	.0	.0
14	11.0	9.5	10.0	6.0	4.5	5.0	.5	.0	.5	.0	.0	.0
15	11.5	9.5	10.0	5.5	5.0	5.0	.5	.0	.0	.0	.0	.0
16	11.5	10.0	10.5	6.5	5.5	6.0	.0	.0	.0	.0	.0	.0
17	10.5	9.0	10.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
18	10.0	8.5	9.0	7.5	7.0	7.5	.5	.0	.0	.0	.0	.0
19	9.0	7.0	8.0	7.5	7.0	7.5	.5	.0	.5	.0	.0	.0
20	9.5	6.0	7.5	8.0	7.5	7.5	.5	.0	.5	.0	.0	.0
21	9.0	7.0	8.0	7.5	6.0	7.0	.5	.0	.5	.0	.0	.0
22	10.0	8.5	9.0	6.0	5.0	5.5	.5	.0	.5	.0	.0	.0
23	10.5	9.5	10.0	4.5	3.5	4.0	.5	.0	.0	.0	.0	.0
24	10.0	7.0	8.5	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
25	8.0	6.0	7.0	3.0	2.0	2.0	.0	.0	.0	.0	.0	.0
26	8.5	8.0	8.0	2.0	1.0	1.5	.0	.0	.0	.0	.0	.0
27	10.0	8.5	9.0	3.5	2.0	2.5	.0	.0	.0	.0	.0	.0
28	10.5	9.5	10.0	3.0	3.0	3.0	.5	.0	.5	.0	.0	.0
29	10.5	9.0	9.5	3.0	2.5	3.0	.5	.0	.0	.0	.0	.0
30	9.0	8.0	8.5	2.5	1.5	2.0	.0	.0	.0	.0	.0	.0
31	8.5	8.0	8.5	---	---	---	.0	.0	.0	.5	.0	.0
MONTH	14.5	6.0	10.0	10.0	1.0	6.0	2.5	.0	.5	.5	.0	.0

DELAWARE RIVER BASIN

01432160 DELAWARE RIVER AT BARRYVILLE, NY

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.0	1.5	.5	1.0	7.0	6.0	6.5	13.5	11.5	12.5
2	.0	.0	.0	3.0	.5	1.5	7.0	5.0	6.0	15.0	12.0	13.5
3	.0	.0	.0	1.5	.5	1.0	6.0	5.5	5.5	15.0	12.0	13.5
4	.0	.0	.0	.5	.5	.5	5.5	4.0	5.0	15.0	12.5	13.5
5	.5	.0	.5	1.5	.5	1.0	4.5	3.5	4.0	16.0	12.0	14.0
6	.5	.5	.5	3.5	.5	1.5	4.5	2.5	3.5	15.0	13.0	14.5
7	.5	.5	.5	1.0	.5	1.0	2.5	1.5	2.0	17.5	13.5	15.5
8	.5	.0	.0	1.5	1.0	1.0	3.5	1.0	2.5	16.5	15.0	16.0
9	.0	.0	.0	1.0	.5	.5	4.0	2.5	3.5	16.5	15.5	16.0
10	.0	.0	.0	2.0	1.0	1.0	6.0	3.0	4.5	17.5	14.0	16.0
11	.0	.0	.0	4.0	1.0	2.0	6.0	4.5	5.5	17.5	14.0	15.5
12	.5	.0	.5	3.0	2.0	2.5	6.0	5.0	5.5	17.5	15.0	16.5
13	.5	.0	.5	2.0	1.5	1.5	5.5	5.0	5.5	20.5	17.0	18.5
14	.5	.5	.5	3.5	1.0	2.0	7.5	5.0	6.0	21.5	18.0	20.0
15	.5	.5	.5	3.0	1.5	2.0	8.5	6.0	7.0	22.5	18.5	20.5
16	1.0	.5	.5	3.0	1.5	2.0	9.5	7.5	8.5	24.0	19.0	21.5
17	.5	.5	.5	2.5	2.0	2.0	11.0	9.0	10.0	24.5	20.5	22.0
18	1.0	.5	.5	4.5	2.0	3.0	11.0	9.5	10.5	25.0	19.5	21.5
19	.5	.5	.5	3.5	2.5	3.0	10.0	8.0	9.0	23.5	18.0	20.5
20	1.5	.5	1.0	4.0	1.5	3.0	10.5	9.0	9.5	26.0	18.5	21.5
21	1.0	.5	1.0	3.5	2.5	2.5	11.5	10.0	11.0	23.0	19.0	21.0
22	1.5	.5	1.0	3.5	2.5	3.0	10.5	9.0	10.0	20.0	18.0	18.5
23	1.5	.5	1.0	4.0	2.0	3.0	10.5	8.0	9.0	18.0	16.0	17.0
24	1.0	.5	.5	5.0	3.5	4.0	12.0	9.0	10.5	15.5	14.5	15.5
25	.5	.5	.5	6.0	4.0	5.0	13.5	10.5	12.0	17.5	14.0	16.0
26	1.5	.5	.5	5.5	4.5	5.5	12.5	12.0	12.0	20.5	15.5	18.5
27	1.5	.5	1.0	4.5	3.5	4.0	13.5	11.5	12.5	21.5	17.5	19.5
28	2.0	.5	1.0	4.0	2.5	3.0	13.5	11.5	12.5	20.5	18.5	19.0
29	---	---	---	5.0	3.0	4.0	13.5	10.5	12.0	21.5	17.5	19.5
30	---	---	---	6.5	4.5	5.0	14.0	11.0	12.5	21.0	20.0	20.5
31	---	---	---	6.0	6.0	6.0	---	---	---	21.0	20.0	20.5
MONTH	2.0	.0	.5	6.5	.5	2.5	14.0	1.0	8.0	26.0	11.5	17.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	19.0	20.0	21.5	19.5	20.5	26.0	22.5	24.0	19.5	19.0	19.0
2	20.5	17.5	19.0	21.5	18.5	20.0	26.5	22.0	24.0	22.5	18.5	20.5
3	19.0	17.0	18.0	20.0	18.5	19.5	26.0	21.5	23.5	22.0	20.0	21.0
4	19.0	17.0	18.0	21.5	18.0	19.5	26.5	21.0	24.0	20.0	18.0	18.5
5	18.5	17.0	17.5	23.0	18.5	21.0	28.0	22.0	25.0	19.5	17.0	18.5
6	17.0	16.0	16.0	24.5	20.5	22.5	26.5	23.0	24.5	20.0	17.5	18.5
7	16.5	15.0	16.0	25.5	21.0	23.5	25.0	23.0	24.0	20.0	17.5	18.5
8	17.5	15.5	16.5	27.0	23.0	25.0	23.5	22.5	23.0	18.5	17.5	18.0
9	20.5	16.5	18.0	27.5	23.0	25.5	24.0	21.5	22.5	20.0	16.5	18.0
10	19.5	18.0	19.0	28.0	22.5	25.5	24.0	21.5	23.0	20.0	17.5	18.5
11	19.0	18.0	18.5	26.0	24.0	25.0	22.5	20.5	21.5	20.0	18.0	19.0
12	18.0	17.0	17.5	28.5	24.0	26.0	22.5	19.5	21.0	20.5	18.0	19.5
13	17.5	15.0	16.0	27.5	23.0	25.5	24.0	19.0	21.5	21.0	18.5	20.0
14	16.5	14.5	15.5	27.0	23.5	25.5	22.5	19.0	21.0	21.5	19.0	20.0
15	18.5	15.5	17.0	28.5	23.0	25.5	22.5	19.5	21.0	20.5	19.0	19.5
16	20.5	17.5	19.0	29.0	24.0	26.5	23.5	19.5	21.5	22.5	19.5	20.0
17	20.5	18.5	19.5	29.5	24.5	27.0	25.0	20.5	22.0	19.5	17.5	18.5
18	22.5	18.5	20.5	31.5	26.5	28.5	24.5	20.0	22.0	17.5	16.0	16.5
19	21.5	19.5	20.5	31.5	27.0	29.0	23.5	20.0	22.0	17.0	14.5	16.0
20	21.5	19.5	20.5	27.0	24.5	25.5	22.5	20.0	21.0	15.5	14.0	14.5
21	21.5	19.0	20.5	26.5	22.0	24.5	21.5	19.0	20.0	15.0	14.0	14.5
22	24.0	19.5	22.0	27.5	22.0	24.5	20.5	17.5	19.0	14.5	14.0	14.5
23	22.0	20.0	21.0	27.5	22.5	24.5	20.5	17.5	18.5	15.5	14.0	14.5
24	22.0	19.0	20.5	29.0	21.5	25.0	22.5	18.0	20.0	16.5	14.5	15.5
25	22.5	18.5	21.0	28.0	23.5	25.5	21.5	19.0	20.0	16.5	14.5	15.5
26	23.5	20.0	22.0	29.5	23.5	26.0	24.0	17.5	20.5	17.0	15.0	16.0
27	25.0	22.5	23.5	29.0	21.0	24.5	21.5	18.5	19.5	18.0	15.5	16.5
28	25.5	22.5	24.0	25.5	23.0	24.0	21.0	18.0	19.5	18.5	15.5	17.0
29	24.0	22.5	23.0	25.5	22.5	23.5	20.0	16.5	18.0	17.5	16.0	16.5
30	23.0	21.0	22.0	25.0	20.5	22.5	20.5	17.0	18.5	18.0	16.5	17.0
31	---	---	---	26.5	20.5	23.0	21.5	17.0	19.0	---	---	---
MONTH	25.5	14.5	19.5	31.5	18.0	24.5	28.0	16.5	21.5	22.5	14.0	17.5

01432805 DELAWARE RIVER AT POND EDDY, NY

LOCATION.--Lat 41°26'20", long 74°49'11", Pike County, Pa. Hydrologic Unit 02040104, at interstate bridge, at Pond Eddy, 450 ft (137 m) downstream from Mill Brook and 4.5 mi (7.2 km) upstream from Mongaup River.

DRAINAGE AREA.--2,820 mi² (7,304 km²).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Temperature recorder since October 1973.

REMARKS.--Temperature probe may be influenced by solar radiation during periods of low flow. No record Dec. 10 to May 13 and May 25 to July 21, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1976, 1978, 1980-81) 31.0°C July 21, 1980; minimum (water years 1974, 1977-78, 1980), freezing point on many days during winter periods, except 1978 and 1980.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.0	13.5	14.0	9.5	9.0	9.0	1.5	.5	1.0			
2	14.5	12.5	13.0	9.5	9.0	9.5	1.0	.5	.5			
3	14.0	12.5	13.0	10.0	9.5	9.5	1.0	1.0	1.0			
4	12.5	10.5	11.5	9.5	8.5	9.0	1.5	1.0	1.0			
5	12.5	11.5	12.0	9.5	9.0	9.0	2.0	1.5	2.0			
6	12.5	12.0	12.5	10.0	9.0	9.5	2.0	.5	1.5			
7	12.5	12.0	12.5	9.0	6.5	8.0	.5	.5	.5			
8	12.0	11.5	11.5	6.5	6.0	6.5	.5	.5	.5			
9	11.5	10.5	11.0	6.5	5.5	6.0	.5	.5	.5			
10	12.0	10.0	11.0	5.5	5.0	5.5	---	---	---			
11	12.5	10.5	11.0	6.5	5.0	6.0	---	---	---			
12	12.5	10.0	11.0	6.0	5.0	6.0	---	---	---			
13	12.5	10.0	11.0	5.5	4.5	5.0	---	---	---			
14	13.0	10.5	11.5	5.5	4.5	5.0	---	---	---			
15	11.5	10.5	11.0	5.0	5.0	5.0	---	---	---			
16	11.5	10.5	11.0	6.0	5.0	5.5	---	---	---			
17	12.0	10.0	11.0	6.5	6.0	6.5	---	---	---			
18	10.5	10.0	10.0	7.0	6.5	7.0	---	---	---			
19	10.0	8.5	9.5	7.5	7.0	7.0	---	---	---			
20	10.0	7.5	8.5	7.5	7.5	7.5	---	---	---			
21	10.5	8.5	9.5	7.5	6.0	7.0	---	---	---			
22	10.5	9.0	10.0	6.0	5.0	5.5	---	---	---			
23	10.5	10.5	10.5	5.0	4.0	4.5	---	---	---			
24	11.0	9.5	10.0	4.0	3.0	3.5	---	---	---			
25	9.0	8.0	8.5	3.0	2.0	2.5	---	---	---			
26	9.0	8.5	8.5	2.0	1.5	1.5	---	---	---			
27	9.5	9.0	9.0	3.0	1.5	2.5	---	---	---			
28	10.5	9.5	10.0	3.0	3.0	3.0	---	---	---			
29	10.5	10.0	10.5	3.0	2.5	3.0	---	---	---			
30	10.0	9.0	9.5	2.5	1.5	2.0	---	---	---			
31	9.0	9.0	9.0	---	---	---	---	---	---			
MONTH	15.0	7.5	10.5	10.0	1.5	6.0	2.0	.5	1.0			

01432805 DELAWARE RIVER AT POND EDDY, NY

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										19.5	16.5	17.5
15										20.5	17.0	18.5
16										21.5	17.5	19.0
17										22.0	19.0	20.0
18										21.5	18.5	20.0
19										20.0	18.5	19.0
20										21.0	18.5	19.5
21										20.0	19.0	19.5
22										19.0	16.5	17.5
23										16.5	14.5	15.5
24										14.5	13.5	14.0
25										---	---	---
26										---	---	---
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										22.0	13.5	18.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	25.0	22.5	23.5	20.0	19.0	19.5
2				---	---	---	25.5	22.5	24.0	22.0	19.5	20.5
3				---	---	---	25.5	23.0	24.0	23.5	21.0	21.5
4				---	---	---	26.0	22.5	24.0	21.0	19.0	20.0
5				---	---	---	26.5	23.5	25.0	21.0	18.0	19.0
6				---	---	---	26.0	24.0	24.5	21.0	18.5	19.5
7				---	---	---	25.0	23.5	24.0	20.0	18.5	19.0
8				---	---	---	24.0	23.0	23.5	18.5	18.0	18.0
9				---	---	---	24.5	22.5	23.5	20.5	17.5	18.5
10				---	---	---	25.0	22.5	23.5	21.5	18.5	19.5
11				---	---	---	23.0	21.5	22.5	21.5	19.0	20.0
12				---	---	---	22.5	20.0	21.0	22.0	19.0	20.0
13				---	---	---	23.5	20.5	21.5	22.5	19.5	20.5
14				---	---	---	23.0	20.0	21.5	22.5	20.0	21.0
15				---	---	---	23.5	20.0	21.5	22.0	20.5	21.0
16				---	---	---	24.5	20.5	22.0	22.5	20.5	21.0
17				---	---	---	23.5	21.0	22.0	21.0	19.0	20.0
18				---	---	---	24.0	20.5	22.0	19.0	17.5	18.0
19				---	---	---	23.5	21.0	22.0	18.5	16.0	17.0
20				---	---	---	22.5	21.0	21.5	16.5	15.0	16.0
21				---	---	---	22.0	20.0	21.0	15.5	14.5	15.0
22				26.0	22.5	24.0	20.5	18.5	19.5	15.0	15.0	15.0
23				25.5	23.0	24.0	20.5	18.5	19.0	16.0	15.0	15.0
24				27.0	22.5	24.0	22.5	18.5	20.5	17.5	15.0	16.0
25				27.5	23.0	24.5	22.0	20.0	20.5	18.0	16.0	16.5
26				28.0	24.0	26.0	23.0	19.0	20.5	17.5	16.0	16.5
27				27.0	24.0	25.0	21.5	20.0	20.5	18.5	16.5	17.5
28				24.5	23.5	24.0	21.5	19.0	20.0	19.0	17.0	17.5
29				25.0	22.0	23.5	20.5	17.5	19.0	18.0	17.5	17.5
30				23.5	22.0	22.5	20.5	18.0	19.0	18.5	17.5	18.0
31				24.5	21.5	23.0	20.5	18.0	19.0	---	---	---
MONTH				28.0	21.5	24.0	26.5	17.5	22.0	23.5	14.5	18.5

DELAWARE RIVER BASIN

01433500 MONGAUP RIVER NEAR MONGAUP, NY

LOCATION.--Lat 41°27'41", long 74°45'33", Sullivan County, Hydrologic Unit 02040104, on right bank 300 ft (91 m) downstream from Rio hydroelectric plant of Orange and Rockland Utilities, Inc., 0.5 mi (0.8 km) downstream from Bush Kill, and 2.8 mi (4.5 km) upstream from mouth and Mongaup.

DRAINAGE AREA.--200 mi^2 (518 km^2), revised.

PERIOD OF RECORD.--August 1939 to current year.

REVISED RECORDS.--WDR NY-71-1: 1970. WDR NY-81-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 625.05 ft (190.515 m) Orange and Rockland Utilities, Inc. datum. Prior to July 6, 1956, water-stage recorders at sites 25 ft (8 m) upstream on Rio Tailrace and 200 ft (61 m) upstream on natural channel, at datum 4.0 ft (1.22 m) higher.

REMARKS.--Records fair. Flow regulated by storage in Cliff Lake, Swinging Bridge, and Toronto Reservoirs (see Reservoirs in Delaware River Basin) and small reservoirs above station.

AVERAGE DISCHARGE.--43 years, 339 ft^3/s (9.60 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,900 ft^3/s (450 m^3/s) Aug. 19, 1955; maximum daily, 12,300 ft^3/s (348 m^3/s), Aug. 19, 1955, minimum daily, 6 ft^3/s (0.17 m^3/s) Oct. 1, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,020 ft^3/s (57.2 m^3/s) Apr. 3, gage height, 5.36 ft (1.634 m); minimum daily, 43 ft^3/s (1.22 m^3/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	599	274	171	225	234	937	445	207	298	93	152
2	195	256	365	87	379	231	1220	258	426	207	64	197
3	107	130	373	70	432	320	1800	384	357	111	154	149
4	56	118	379	303	682	352	1950	643	402	102	199	83
5	106	199	209	519	647	323	1810	429	288	89	242	56
6	169	290	183	577	618	341	1790	435	192	281	133	48
7	166	402	116	501	454	315	1720	411	328	481	66	63
8	183	547	203	471	451	308	1370	234	325	505	57	178
9	179	164	357	247	417	494	775	106	607	435	231	197
10	97	138	247	100	408	201	728	225	310	195	515	260
11	54	106	219	253	390	199	723	399	147	96	376	197
12	136	93	123	357	384	249	714	357	207	281	223	217
13	229	176	66	368	387	215	705	352	157	423	130	365
14	179	108	57	368	179	167	728	298	384	522	66	308
15	166	63	71	384	276	352	544	140	551	442	57	336
16	205	73	167	172	368	423	536	76	723	474	51	346
17	109	116	242	91	373	458	283	122	512	323	84	286
18	55	181	238	199	384	414	756	215	417	269	167	114
19	117	283	122	382	384	551	1910	242	474	417	215	59
20	172	300	70	310	365	508	1720	448	262	477	219	167
21	174	249	60	338	174	519	1540	529	323	396	118	195
22	194	127	178	295	265	555	860	121	382	464	59	203
23	183	192	315	494	373	669	752	82	368	405	117	117
24	100	341	256	176	360	682	540	217	236	207	116	62
25	54	349	125	234	346	855	505	432	103	76	194	51
26	89	181	82	320	373	968	484	308	88	227	174	45
27	215	73	72	368	171	1000	714	323	82	603	201	51
28	207	75	236	354	80	925	719	360	149	626	162	47
29	203	102	354	298	---	865	691	417	423	368	64	43
30	213	126	225	105	---	835	484	244	454	354	108	132
31	376	---	242	70	---	883	---	103	---	215	109	---
TOTAL	4873	6157	6226	8982	10345	15411	30008	9355	9884	10369	4764	4724
MEAN	157	205	201	290	369	497	1000	302	329	334	154	157
MAX	376	599	379	577	682	1000	1950	643	723	626	515	365
MIN	54	63	57	70	80	167	283	76	82	76	51	43

CAL YR 1981 TOTAL 101084 MEAN 277 MAX 3500 MIN 25
WTR YR 1982 TOTAL 121098 MEAN 332 MAX 1950 MIN 43

01434000 DELAWARE RIVER AT PORT JERVIS, NY

LOCATION.--Lat 41°22'14", long 74°41'52", Pike County, Pa., Hydrologic Unit 02040104, on right bank 250 ft (76 m) downstream from bridge (on U.S. Highways 6 and 209) between Port Jervis, N.Y. and Matamoras, Pa., 1.2 mi (1.9 km) upstream from Neversink River, and 6.5 mi (10.5 km) downstream from Mongaup River. Water-quality sampling site at discharge station.

DRAINAGE AREA.--3,070 mi² (7,951 km²), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1904 to current year.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1031: 1905-36. WRD NY 1971: 1970.

GAGE.--Water-stage recorder. Datum of gage is 415.35 ft (126.599 m) National Geodetic Vertical Datum of 1929. October 1904 to August 13, 1928, nonrecording gage at bridge 250 ft (76 m) upstream at present datum, operated by U.S. Weather Bureau prior to June 20, 1914.

REMARKS.--Records good. Flow regulated by Lake Wallenpaupack and by Toronto, Cliff Lake, and Swinging Bridge Reservoirs (see Reservoirs in Delaware River Basin) and smaller reservoirs. Large diurnal fluctuations at medium and low flows caused by powerplants on tributary streams. Subsequent to September 1954, entire flow from 371 mi² (961 km²) of drainage area controlled by Pepacton Reservoir, and subsequent to October 1963, entire flow from 454 mi² (1,176 km²) of drainage area controlled by Cannonsville Reservoir (see Reservoirs in Delaware River Basin). Part of flow from these reservoirs diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233,000 ft³/s (6,600 m³/s) Aug. 19, 1955, gage height, 23.91 ft (7.288 m), from floodmarks in gage house, from rating curve extended above 89,000 ft³/s (2,520 m³/s) on basis of slope-area measurement of peak flow; maximum gage height, 26.6 ft (8.118 m) Feb. 12, 1981 (ice jam), from floodmarks; minimum observed discharge, 175 ft³/s (4.96 m³/s) Sept. 23, 1908, gage height, 0.6 ft (0.18 m).

EXTREMES OUTSIDE PERIOD OF RECORD.--The U.S. Weather Bureau reported a discharge of 205,000 ft³/s (5,810 m³/s) Oct. 10, 1903, gage height, 23.1 ft (7.04 m), from rating curve extended above 70,000 ft³/s (1,980 m³/s) by velocity-area studies; stage on Mar. 8, 1904, was 25.5 ft (7.77 m), ice jam.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,300 ft³/s (971 m³/s) Apr. 4, gage height, 9.05 ft (2.758 m); maximum gage height, 15.82 ft (4.822 m) Feb. 5 (ice jam); minimum discharge, 941 ft³/s (26.6 m³/s) Oct. 1, gage height, 1.87 ft (0.570 m); minimum daily, 1,070 ft³/s (30.3 m³/s) Oct. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	3640	1740	2130	1600	2110	16100	5870	2290	5170	1450	1580
2	1850	3100	2050	2300	2300	2190	17400	5300	4300	4360	1430	1880
3	1680	3500	3130	2600	3700	2230	14300	5230	5230	3720	1450	1880
4	1640	3200	3480	3060	6400	1850	28300	5300	4570	3010	1430	1940
5	1590	3030	2960	8490	13000	2330	21800	4780	4040	2670	1400	1850
6	1530	2990	2690	8580	10500	1690	16700	4270	4040	2430	1580	1810
7	1340	3280	2330	6670	8200	2250	14100	4040	5670	2800	1630	1740
8	1500	2940	2430	5360	6400	2410	11800	3450	6480	2600	1630	1660
9	1830	2370	2560	4450	5200	2290	10000	2760	5700	2350	1780	1740
10	1710	2130	2270	3800	4700	2090	8890	2670	4720	2090	2170	1830
11	1590	2780	2150	2800	4200	2070	8710	2940	4190	1450	2190	1900
12	1510	2580	2030	2450	3350	2670	8450	2620	3910	1510	1920	1920
13	1530	2560	1880	2990	3330	3990	7980	2350	3960	2150	1830	1990
14	1680	2450	1580	3200	3250	5840	8150	2170	6410	2330	1540	1940
15	1510	1660	1610	3300	2990	8230	8020	1920	5980	2090	1590	1680
16	1560	1740	1780	3000	3060	8230	7770	1660	4850	2090	1610	1710
17	1580	1780	1990	2700	3560	7530	7450	1530	4630	1990	1560	1710
18	1540	1900	1760	2600	3480	7130	18100	1510	4600	1510	1510	1800
19	1340	1960	1630	2600	3280	9020	20000	1690	4300	1540	1760	1760
20	1230	2030	1140	2400	2890	9660	14700	1810	3740	1990	1740	1730
21	1630	2540	1100	2400	2560	11100	12400	1980	3200	2110	1740	1730
22	1540	2800	1150	2200	2800	12400	10400	1540	3080	2110	1590	1760
23	1540	2510	2500	2300	2870	12500	8840	1450	3060	1880	1710	1740
24	1280	2430	2800	2200	2800	12200	8070	1730	2990	1690	1590	1710
25	1070	2390	4300	1900	2670	13600	7530	2470	2600	1500	1630	1590
26	1540	2130	3500	2100	2390	18900	7130	2370	2290	1340	1760	1640
27	1780	1850	2850	2100	1880	20900	8670	2150	1810	1710	1800	1730
28	5360	1800	2710	2000	1730	13900	9340	2090	1810	1850	1300	1450
29	9390	1800	2960	1900	---	10700	8020	2270	2510	1810	1680	1480
30	5670	1690	2500	1750	---	9110	6750	2090	4270	1530	1690	1740
31	4220	---	2170	1450	---	9290	---	2110	---	1300	1630	---
TOTAL	66450	73560	71730	97780	115090	230410	355870	86120	121230	68680	51320	52620
MEAN	2144	2452	2314	3154	4110	7433	11860	2778	4041	2215	1655	1754
MAX	9390	3640	4300	8580	13000	20900	28300	5870	6480	5170	2190	1990
MIN	1070	1660	1100	1450	1600	1690	6750	1450	1810	1300	1300	1450

CAL YR 1981 TOTAL 1175820 MEAN 3221 MAX 42100 MIN 1070
WTR YR 1982 TOTAL 1390860 MEAN 3811 MAX 28300 MIN 1070

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1964 to current year.
CHEMICAL DATA: 1958-59 (e), 1964-65 (c), 1966 (a), 1967-68 (c), 1969-76 (d).
MINOR ELEMENTS DATA: 1970 (a), 1972-73 (a), 1974-76 (c).
PESTICIDE DATA: 1974 (a).
ORGANIC DATA: OC--1974 (b), 1975 (d).
NUTRIENT DATA: 1968 (a), 1969-76 (d).
BIOLOGICAL DATA:
Bacteria--1973-76 (d).
Phytoplankton--1974 (b), 1975-76 (c).
Periphyton--1976 (a).
SEDIMENT DATA: 1959 (c), 1976 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1973 to September 1973.
WATER TEMPERATURES: February 1957 to September 1960, January 1973 to September 1973, June 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: February 1957 to September 1960, March 1970 to June 1976.

INSTRUMENTATION.--Temperature recorder since January 1973.

REMARKS.--No temperature record Apr. 26 to July 27, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1957-59, 1973-81), 30.0°C July 13, 1981; minimum (water years 1958-60, 1973, 1975-82), freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	11.5	13.0	10.0	9.0	9.5	2.0	1.0	1.0	.0	.0	.0
2	13.5	12.5	13.0	10.0	9.0	9.5	2.0	1.5	2.0	.0	.0	.0
3	13.0	12.0	12.5	10.0	9.0	9.5	2.5	2.0	2.0	.0	.0	.0
4	12.5	11.5	12.0	9.5	8.5	9.0	2.0	1.5	2.0	.0	.0	.0
5	13.0	11.5	12.5	10.0	8.5	9.5	2.5	2.0	2.5	.5	.0	.0
6	13.0	12.5	12.5	10.5	9.0	9.5	2.0	.5	1.5	.0	.0	.0
7	13.0	12.0	12.5	9.5	7.0	8.0	1.0	.5	1.0	.5	.0	.0
8	12.0	11.0	11.5	7.5	6.5	7.0	1.5	1.0	1.5	.0	.0	.0
9	12.0	10.5	11.0	6.5	6.0	6.5	1.5	.5	1.0	.0	.0	.0
10	11.5	10.0	11.0	6.0	5.0	5.5	.5	.0	.0	.0	.0	.0
11	11.5	10.0	11.0	7.0	5.0	6.0	.5	.0	.5	.0	.0	.0
12	11.5	10.0	11.0	6.5	5.5	6.0	1.0	.0	.5	.0	.0	.0
13	11.5	10.0	11.0	6.0	4.5	5.0	.5	.0	.0	.0	.0	.0
14	12.0	10.0	11.0	6.0	4.0	5.5	.5	.0	.0	.0	.0	.0
15	11.5	10.5	11.0	6.0	5.5	6.0	.5	.0	.0	.0	.0	.0
16	12.0	10.5	11.0	6.5	6.0	6.0	.0	.0	.0	.0	.0	.0
17	11.5	10.0	11.0	7.5	6.5	7.0	.0	.0	.0	.0	.0	.0
18	11.0	10.0	10.0	7.5	7.0	7.0	.0	.0	.0	.0	.0	.0
19	10.0	9.0	9.5	8.0	7.0	7.5	.0	.0	.0	.0	.0	.0
20	10.0	8.0	9.0	8.0	7.5	8.0	.0	.0	.0	.0	.0	.0
21	10.0	8.5	9.0	8.0	6.0	7.0	.5	.0	.0	.0	.0	.0
22	11.0	9.5	10.0	6.0	5.0	5.5	.0	.0	.0	.0	.0	.0
23	11.0	10.5	11.0	5.0	4.0	4.5	.0	.0	.0	.0	.0	.0
24	10.5	9.0	10.0	4.0	3.5	4.0	.0	.0	.0	.0	.0	.0
25	9.0	8.0	9.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
26	9.5	8.5	9.0	2.5	2.0	2.5	.0	.0	.0	.0	.0	.0
27	10.5	9.5	10.0	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
28	10.5	10.5	10.5	3.5	3.0	3.5	.0	.0	.0	.0	.0	.0
29	10.5	10.0	10.5	3.5	2.5	3.0	.0	.0	.0	.0	.0	.0
30	9.5	9.0	9.0	2.5	2.0	2.0	.0	.0	.0	.0	.0	.0
31	9.5	9.0	9.0	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	14.0	8.0	11.0	10.5	2.0	6.0	2.5	.0	.5	.5	.0	.0

01434000 DELAWARE RIVER AT PORT JERVIS, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	1.0	.0	.5	6.0	5.5	6.0			
2	.0	.0	.0	2.0	.0	1.0	6.0	5.0	5.5			
3	.0	.0	.0	1.0	.0	.5	5.5	5.0	5.0			
4	.0	.0	.0	.0	.0	.0	5.0	3.5	4.5			
5	.0	.0	.0	1.0	.0	.5	3.5	2.5	3.5			
6	.5	.0	.0	1.0	.0	.5	3.5	1.5	2.5			
7	.0	.0	.0	1.0	.5	.5	1.5	1.0	1.0			
8	.0	.0	.0	1.5	.0	.5	2.0	.5	1.5			
9	.5	.0	.5	.5	.0	.5	3.0	1.5	2.5			
10	.0	.0	.0	1.5	.0	1.0	4.5	2.5	3.5			
11	.0	.0	.0	2.0	.5	1.0	5.5	4.0	4.5			
12	.0	.0	.0	3.5	1.5	2.0	5.5	4.5	5.0			
13	.5	.0	.0	2.0	1.5	1.5	5.0	4.5	4.5			
14	.0	.0	.0	2.5	1.0	1.5	6.5	4.5	5.5			
15	.5	.0	.0	2.0	1.0	1.5	7.5	5.5	6.5			
16	1.0	.0	.5	2.0	1.5	1.5	9.0	7.0	8.0			
17	.5	.0	.0	2.0	1.5	1.5	11.0	9.0	9.5			
18	1.0	.0	.5	3.0	1.5	2.0	10.5	9.5	10.0			
19	.0	.0	.0	3.0	2.0	2.5	9.0	7.5	8.5			
20	1.0	.0	.5	3.0	1.5	2.0	9.5	8.0	9.0			
21	1.0	.5	.5	3.0	2.0	2.0	10.5	9.5	10.0			
22	1.5	.0	.5	2.5	1.5	2.0	10.0	9.0	9.5			
23	1.5	.0	1.0	3.0	1.5	2.0	9.5	8.0	8.5			
24	1.0	.0	.5	4.0	2.5	3.5	12.5	8.5	10.0			
25	.5	.0	.0	5.0	3.5	4.5	13.5	11.0	12.0			
26	.5	.0	.5	5.0	4.0	5.0	---	---	---			
27	1.0	.0	.5	4.0	2.5	3.5	---	---	---			
28	1.5	.0	.5	2.5	2.0	2.5	---	---	---			
29	---	---	---	3.5	2.0	3.0	---	---	---			
30	---	---	---	5.0	3.5	4.5	---	---	---			
31	---	---	---	6.0	5.0	5.5	---	---	---			
MONTH	1.5	.0	.0	6.0	.0	2.0	13.5	.5	6.5			

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	24.5	23.0	24.0	20.0	20.0	20.0
2				---	---	---	25.0	23.0	24.0	22.0	20.0	21.0
3				---	---	---	25.5	23.5	24.5	23.0	21.0	22.0
4				---	---	---	26.0	23.5	25.0	21.5	19.5	20.0
5				---	---	---	27.0	24.5	26.0	20.5	18.0	19.5
6				---	---	---	26.0	24.5	25.5	21.0	18.5	20.0
7				---	---	---	26.5	24.5	25.5	20.5	18.5	19.5
8				---	---	---	25.5	24.0	24.5	19.0	18.0	18.5
9				---	---	---	25.5	23.5	24.5	20.0	17.5	18.5
10				---	---	---	25.5	23.5	24.5	21.0	18.5	20.0
11				---	---	---	24.5	22.5	23.0	21.0	19.0	20.0
12				---	---	---	23.0	21.0	22.0	21.5	19.0	20.5
13				---	---	---	23.0	21.0	22.0	21.5	19.5	20.5
14				---	---	---	23.0	21.0	22.0	21.5	19.5	20.5
15				---	---	---	23.5	20.5	22.5	21.0	20.0	20.5
16				---	---	---	23.5	21.5	22.5	21.0	20.0	20.5
17				---	---	---	24.0	22.5	23.0	20.5	19.0	19.5
18				---	---	---	24.0	21.5	23.0	19.0	17.5	18.0
19				---	---	---	23.5	21.5	22.5	17.5	16.0	17.0
20				---	---	---	23.0	21.5	22.0	16.5	15.0	15.5
21				---	---	---	22.0	20.5	21.5	15.5	14.5	15.0
22				---	---	---	21.0	19.0	20.0	15.0	14.5	14.5
23				---	---	---	20.5	19.0	20.0	16.0	14.5	15.0
24				---	---	---	22.0	19.5	21.0	16.0	14.5	15.5
25				---	---	---	21.5	20.0	21.0	17.0	15.0	16.0
26				---	---	---	22.0	19.5	21.0	16.5	15.5	16.0
27				---	---	---	21.5	20.5	21.0	17.5	16.0	16.5
28				25.0	22.5	23.5	21.5	19.5	20.5	18.0	16.0	17.0
29				24.5	21.5	23.0	20.0	18.0	19.0	17.5	17.0	17.0
30				23.5	22.0	23.0	20.0	18.0	19.5	17.5	16.5	17.0
31				24.5	21.5	23.0	20.0	18.5	19.5	---	---	---
MONTH				25.0	21.5	23.0	27.0	18.0	22.5	23.0	14.5	18.5

01435000 NEVERSINK RIVER NEAR CLARYVILLE, NY

LOCATION.--Lat 41°53'24", long 74°35'25", Sullivan County, Hydrologic Unit 02040104, on left bank 50 ft (15 m) downstream from covered bridge, 300 ft (91 m) upstream from small tributary, 2.2 mi (3.5 km) downstream from confluence of East and West Branches, and 2.2 mi (3.5 km) southwest of Claryville.

DRAINAGE AREA.--66.6 mi^2 (172 km^2), revised.

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,522.37 ft (464.018 m) National Geodetic Vertical Datum of 1929. Prior to October 1, 1974, at datum 6.00 ft (1.829 m) higher. Oct. 1, 1974 to Sept. 30, 1979 at datum 5.00 ft (1.524 m) higher.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--31 years, 189 ft^3/s (5.352 m^3/s), 38.54 in/yr (979 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s (442 m^3/s) Mar. 21, 1980, maximum gage height, 13.83 ft (4.215 m) present datum, July 10, 1952; minimum discharge, 6.8 ft^3/s (0.19 m^3/s) Sept. 24, 25, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 25, 1950, reached a stage of about 15.0 ft (4.57 m) present datum, from floodmarks, discharge, 23,400 ft^3/s (663 m^3/s) by slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s) and maximum (*):

		Discharge		Gage height				Discharge		Gage height	
Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)	Date	Time	(ft^3/s)	(m^3/s)	(ft)	(m)
Apr. 3	2015	4,290	121	9.70	2.956	Apr. 18	0215	*8,050	228	*10.95	3.338

Minimum discharge, 19 ft^3/s (0.54 m^3/s) Sept. 10, 14, 15, 19, 20, gage height, 5.20 ft (1.585 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	191	98	100	110	94	1410	305	139	127	63	98
2	116	177	185	87	180	92	749	275	209	106	50	66
3	79	161	161	83	400	90	1470	251	161	98	44	65
4	68	151	136	341	900	90	1590	231	164	93	42	44
5	63	141	127	445	495	88	657	215	156	86	39	33
6	64	171	116	241	345	88	483	200	757	83	37	28
7	79	169	114	180	257	88	375	191	942	79	35	25
8	83	143	118	150	220	90	332	180	341	76	34	24
9	82	136	112	140	200	90	290	171	241	73	38	23
10	74	129	100	130	180	92	257	164	194	69	37	21
11	70	123	104	120	170	96	244	151	171	67	33	21
12	67	118	104	115	160	153	231	143	156	108	30	20
13	67	114	98	110	160	171	224	146	171	81	29	20
14	64	112	96	110	160	197	272	134	209	69	29	19
15	64	115	102	105	156	171	297	127	158	66	28	20
16	63	125	100	100	161	164	404	120	141	67	26	31
17	61	123	94	98	146	161	1310	116	153	62	29	24
18	68	116	96	95	129	158	3330	112	134	58	31	21
19	120	110	75	92	129	177	1040	110	123	55	27	20
20	85	139	83	88	125	174	842	108	118	62	25	19
21	74	151	83	86	120	191	826	110	110	59	28	20
22	71	129	91	84	116	191	578	102	102	53	25	21
23	91	117	143	82	110	194	424	118	114	49	24	28
24	163	112	148	80	108	209	380	136	102	47	23	31
25	116	106	110	78	104	257	366	125	93	44	34	24
26	141	102	96	77	100	628	720	106	87	43	37	21
27	316	110	96	76	98	389	1080	96	87	40	27	60
28	668	110	96	75	96	294	560	93	96	67	23	59
29	341	102	94	74	---	264	409	146	247	58	21	38
30	254	96	86	73	---	286	345	148	218	46	20	31
31	218	---	72	72	---	713	---	141	---	52	20	---
TOTAL	3939	3899	3334	3787	5635	6140	21495	4771	6094	2143	988	975
MEAN	127	130	108	122	201	198	717	154	203	69.1	31.9	32.5
MAX	668	191	185	445	900	713	3330	305	942	127	63	98
MIN	49	96	72	72	96	88	224	93	87	40	20	19
CFSM	1.91	1.95	1.62	1.83	3.02	2.97	10.8	2.31	3.05	1.04	.48	.49
IN.	2.20	2.18	1.86	2.12	3.15	3.43	12.01	2.66	3.40	1.20	.55	.54

CAL YR 1981 TOTAL 61239 MEAN 168 MAX 6090 MIN 25 CFSM 2.52 IN 34.21
WTR YR 1982 TOTAL 63200 MEAN 173 MAX 3330 MIN 19 CFSM 2.60 IN 35.30

01436000 NEVERSINK RIVER AT NEVERSINK, NY

LOCATION.--Lat 41°49'12", long 74°38'09", Sullivan County, Hydrologic Unit 02040104, on right bank at downstream end of outlet channel, 1,650 ft (503 m) downstream from Neversink Dam and State Highway 55, 1.7 mi (2.7 km) southwest of Neversink, and 2.6 mi (4.2 km) upstream from Wynkoop Brook.

DRAINAGE AREA.--92.6 mi^2 (240 km^2), revised.

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WRD NY 1972: 1961 (M), 1968 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,255.24 ft (382.597 m) Board of Water Supply, City of New York datum. Prior to Jan. 17, 1953, water-stage recorder at site 650 ft (198 m) downstream at datum 0.20 ft (0.061 m) lower. Jan. 17, 1953 to Apr. 16, 1954, water-stage recorder at present site at datum 0.41 ft (0.125 m) higher.

REMARKS.--Records good. Subsequent to June 1953, entire flow from 91.8 mi^2 (238 km^2) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply (see Reservoirs in Delaware River Basin). Remainder of flow (except for conservation release and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,300 ft^3/s (632 m^3/s) Nov. 25, 1950, from rating curve extended above 2,600 ft^3/s (73.6 m^3/s) on basis of contracted-opening and critical-depth measurements of peak flow; maximum gage height, 11.65 ft (3.551 m) Sept. 27, 1942, site and datum then in use; no flow for all or part of each day Sept. 22-24, Oct. 26-29, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 904 ft^3/s (25.6 m^3/s) Apr. 20, gage height, 4.55 ft (1.387 m); minimum, 5.8 ft^3/s (0.164 m^3/s) Oct. 26, gage height, 2.56 ft (0.780 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	24	26	23	23	25	44	46	44	42	43	63
2	44	25	26	23	23	25	43	46	45	42	45	63
3	45	26	24	23	25	26	46	46	46	42	43	64
4	45	25	24	24	24	27	44	46	46	42	43	63
5	45	25	24	23	24	27	45	46	46	42	43	63
6	44	28	22	24	25	28	49	46	45	42	51	64
7	42	27	23	24	27	28	44	47	44	42	64	64
8	43	27	24	24	24	28	42	47	44	42	64	66
9	44	27	23	24	24	27	43	47	44	42	64	64
10	44	28	22	24	30	25	44	48	45	42	59	64
11	45	27	23	24	27	26	45	48	45	42	46	64
12	45	27	24	24	24	26	44	49	45	42	45	64
13	45	27	24	24	24	26	45	49	45	42	47	66
14	43	27	24	24	24	26	44	45	45	42	47	68
15	44	27	24	23	26	26	45	43	45	47	43	68
16	45	26	23	24	26	27	45	43	45	59	43	64
17	44	26	23	24	25	27	46	43	45	61	43	63
18	45	26	24	24	25	27	45	43	45	64	43	63
19	43	27	24	24	24	27	528	43	45	66	52	66
20	42	27	24	23	24	27	675	43	45	57	66	66
21	42	27	24	24	24	27	382	43	45	41	55	66
22	42	27	24	24	24	27	226	43	46	45	43	66
23	42	27	25	24	24	27	108	43	46	45	43	64
24	42	27	26	24	25	27	54	43	45	45	51	64
25	43	27	27	23	25	27	48	43	43	45	63	66
26	39	28	27	23	25	27	48	43	46	45	64	66
27	43	28	27	24	25	26	320	43	46	45	64	64
28	43	28	27	24	25	26	223	43	45	46	63	64
29	43	27	23	24	---	27	58	45	47	43	63	64
30	38	27	23	24	---	34	48	44	47	43	63	64
31	24	---	24	23	---	46	---	44	---	43	63	---
TOTAL	1323	802	752	735	695	852	3521	1391	1355	1428	1629	1938
MEAN	42.7	26.7	24.3	23.7	24.8	27.5	117	44.9	45.2	46.1	52.5	64.6
MAX	45	28	27	24	30	46	675	49	47	66	66	68
MIN	24	24	22	23	23	25	42	43	43	41	43	63

CAL YR 1981 TOTAL 9657.5 MEAN 26.5 MAX 91 MIN 4.8
WTR YR 1982 TOTAL 16421.0 MEAN 45.0 MAX 675 MIN 22

01436500 NEVERSINK RIVER AT WOODBOURNE, NY

LOCATION.--Lat 41°45'24", long 74°35'52", Sullivan County, Hydrologic Unit 02040104, on left bank 0.2 mi (0.3 km) downstream from highway bridge at Woodbourne, 0.3 mi (0.5 km) upstream from outlet of South Wind Lake. Water-quality sampling site at discharge station.

DRAINAGE AREA.--113 mi^2 (293 km^3).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to September 1973, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,180 ft (360 m), from topographic map. Prior to Sept. 20, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good except those for periods of no gage height record, Dec. 1 to Jan. 5 and Aug. 6 to Sept. 30, which are fair, and those for winter periods, which are poor. Subsequent to June 1953, entire flow from 91.8 mi^2 (238 km^2) of drainage area controlled by Neversink Reservoir. Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill) impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,000 ft^3/s (623 m^3/s) Nov. 26, 1950, gage height, 11.19 ft (3.411 m), maximum gage height, 11.2 ft (3.414 m) July 22, 1938, from floodmarks and graph based on gage readings; minimum discharge, 6.7 ft^3/s (0.19 m^3/s) June 27, 1953; minimum daily, 8.2 ft^3/s (0.23 m^3/s) June 25, 1953; minimum gage height, 0.80 ft (0.244 m) Aug. 25, 27, 28, 1949.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,000 ft^3/s (28.3 m^3/s) Apr. 20, gage height 3.80 ft (1.158 m); minimum recorded, 33 ft^3/s (0.935 m^3/s) Nov. 4, 5, gage height 1.30 ft (0.396 m) but may have been lower during periods of no gage height record Dec. 1 to Jan. 5 and Aug. 6 to Sept. 30; minimum daily discharge 34 ft^3/s (0.963 m^3/s) Nov. 5, Dec. 13-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	39	37	39	48	41	350	92	74	60	49	70
2	56	37	64	39	46	41	197	87	155	56	51	67
3	49	37	59	45	190	40	308	93	88	54	53	73
4	48	36	49	150	220	41	318	87	78	54	49	67
5	46	34	46	147	140	42	171	82	73	53	49	65
6	51	45	43	123	120	42	140	79	91	52	51	67
7	55	45	41	86	100	43	137	78	204	51	73	67
8	51	40	40	68	90	44	133	76	105	50	73	67
9	49	39	40	58	80	45	107	76	86	50	75	67
10	48	39	39	52	70	45	104	74	76	51	75	62
11	48	37	38	49	64	46	111	71	73	51	73	68
12	48	37	37	47	60	60	109	70	71	51	49	64
13	48	36	34	45	58	100	110	75	95	48	49	65
14	46	36	34	44	56	110	125	69	116	48	59	68
15	46	39	34	43	54	112	116	63	84	49	48	70
16	49	39	34	42	54	100	117	62	75	61	48	67
17	48	43	34	42	54	99	163	60	90	62	48	62
18	51	40	35	41	52	105	452	59	75	65	48	62
19	58	37	35	41	52	120	618	59	70	67	48	62
20	49	48	36	40	52	120	816	59	69	76	73	65
21	49	52	37	40	52	130	505	58	66	48	67	67
22	48	45	38	40	50	140	327	59	63	49	48	71
23	52	40	50	39	48	150	176	65	70	49	48	73
24	62	39	60	39	46	157	105	67	62	49	48	67
25	53	37	52	39	45	193	91	64	58	48	75	67
26	55	39	50	39	44	269	131	59	59	48	70	65
27	73	40	47	39	43	168	447	57	59	48	68	71
28	121	40	45	38	42	130	348	56	58	67	65	73
29	71	39	43	38	---	109	129	84	85	53	65	68
30	62	37	41	38	---	115	100	72	84	48	65	67
31	42	---	40	40	---	246	---	81	---	49	65	---
TOTAL	1683	1191	1312	1670	2030	3203	7061	2193	2512	1665	1825	2014
MEAN	54.3	39.7	42.3	53.9	72.5	103	235	70.7	83.7	53.7	58.9	67.1
MAX	121	52	64	150	220	269	816	93	204	76	75	73
MIN	42	34	34	38	42	40	91	56	58	48	48	62

CAL YR 1981 TOTAL 22452 MEAN 61.5 MAX 863 MIN 18
WTR YR 1982 TOTAL 28359 MEAN 77.7 MAX 816 MIN 34

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964, 1965, 1972, 1978 to current year.
CHEMICAL DATA: 1964 (b), 1965 (c), 1972 (a).
NUTRIENT DATA: 1964 (b), 1965 (c), 1972 (a).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: July and August, 1978, May 1979 to current year.

INSTRUMENTATION.--Temperature recorder since October 1977.

REMARKS.--No record Oct. 23 to Dec. 1 and Mar. 25-30, due to instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum (water years 1979-82), 26.5°C June 16, 1981; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 21.0°C July 8, 9, minimum, freezing point on many days during December to April.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	8.5	9.0				---	---	---	.5	.5	.5
2	11.5	9.0	10.0				4.0	1.0	2.5	.5	.5	.5
3	10.5	9.5	10.0				3.5	2.0	3.0	.5	.5	.5
4	13.0	9.0	10.5				3.0	2.0	2.5	.5	.5	.5
5	12.0	10.5	11.5				3.5	2.5	3.0	.5	.0	.5
6	11.5	11.0	11.5				2.5	.5	1.0	.5	.0	.0
7	11.0	9.5	10.5				1.5	.5	.5	1.0	.5	.5
8	12.5	9.0	10.0				3.0	1.5	2.5	.5	.0	.0
9	11.0	9.0	10.0				2.5	.5	1.5	.5	.0	.0
10	12.5	8.0	9.5				1.0	.5	.5	.5	.0	.5
11	12.5	8.0	9.5				1.0	.5	.5	.5	.0	.5
12	11.5	7.5	9.5				2.0	.5	1.0	.5	.5	.5
13	12.0	7.5	9.5				2.5	.5	1.5	.5	.5	.5
14	12.5	8.0	10.0				1.0	.5	1.0	.5	.5	.5
15	11.5	8.0	9.5				1.0	.5	.5	.5	.5	.5
16	11.5	9.0	10.0				1.0	.5	.5	.5	.5	.5
17	12.5	8.0	10.0				.5	.5	.5	.5	.5	.5
18	9.5	8.0	8.5				.5	.5	.5	.5	.5	.5
19	9.5	7.5	8.5				.5	.5	.5	.5	.5	.5
20	10.5	6.0	8.0				1.0	.5	.5	.5	.5	.5
21	11.5	7.5	9.0				.5	.5	.5	.5	.5	.5
22	11.5	9.0	10.0				.5	.5	.5	.5	.5	.5
23	---	---	---				.5	.5	.5	.5	.5	.5
24	---	---	---				.5	.5	.5	.5	.5	.5
25	---	---	---				.5	.5	.5	.5	.5	.5
26	---	---	---				.5	.5	.5	.5	.5	.5
27	---	---	---				.5	.5	.5	.5	.5	.5
28	---	---	---				.5	.5	.5	.5	.0	.5
29	---	---	---				1.0	.5	.5	.5	.0	.5
30	---	---	---				.5	.0	.5	.5	.0	.0
31	---	---	---				.5	.5	.5	.5	.0	.0
MONTH	13.0	6.0	10.0				4.0	.0	1.0	1.0	.0	.5

01436500 NEVERSINK RIVER AT WOODBOURNE, NY--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.5	.0	.0	.5	.0	.0	6.0	1.5	3.5	12.5	7.0	10.0
2	.5	.0	.0	.5	.0	.5	7.0	1.5	4.0	13.5	7.5	10.5
3	.0	.0	.0	.5	.0	.5	3.5	2.0	2.5	12.0	7.5	10.0
4	.5	.0	.0	.0	.0	.0	4.0	1.0	2.5	12.0	7.5	10.0
5	.5	.0	.5	.5	.0	.0	5.5	.0	2.5	14.5	6.5	11.0
6	.5	.5	.5	.5	.0	.5	2.5	.0	.5	11.0	8.0	9.5
7	.5	.5	.5	.5	.0	.5	1.5	.0	.5	15.5	8.5	12.0
8	.5	.5	.5	.5	.0	.5	2.5	.0	1.0	12.5	9.5	11.0
9	.5	.5	.5	.0	.0	.0	3.5	.0	2.0	10.5	9.5	10.0
10	.5	.5	.5	.5	.0	.0	7.5	.5	3.5	15.5	8.0	11.5
11	.5	.5	.5	3.0	.5	2.0	6.5	1.0	3.5	15.5	8.5	12.0
12	.5	.5	.5	2.0	1.5	1.5	5.5	2.0	3.5	12.5	9.5	11.0
13	.5	.5	.5	6.0	.5	3.0	4.0	2.0	3.0	15.5	9.5	12.5
14	.5	.5	.5	3.5	2.0	2.5	9.0	2.0	5.5	17.0	9.5	13.0
15	.5	.0	.5	6.0	1.0	3.0	9.5	2.0	6.0	17.5	10.0	14.0
16	.5	.0	.5	2.5	2.0	2.0	11.0	3.5	7.5	17.0	11.0	14.0
17	.5	.0	.5	5.0	1.5	3.0	8.0	5.5	7.0	17.5	12.0	14.5
18	.5	.0	.5	6.5	1.0	3.0	9.5	5.0	7.0	15.5	11.5	14.0
19	.5	.0	.5	5.5	.5	2.5	6.5	3.0	4.5	14.5	11.0	13.0
20	.5	.0	.5	7.0	1.0	3.5	6.0	2.5	4.5	17.5	12.0	14.5
21	.5	.0	.5	3.5	.5	2.5	7.5	3.5	5.0	15.0	12.0	13.0
22	.5	.0	.0	4.0	.0	1.5	7.0	2.5	4.5	11.5	9.5	10.5
23	.5	.0	.5	3.5	.0	1.5	10.0	2.5	6.0	9.5	8.5	9.0
24	.5	.0	.5	6.0	.0	3.0	12.5	4.5	8.5	9.0	8.0	8.5
25	.5	.0	.0	---	---	---	13.5	6.0	10.0	15.5	9.0	12.0
26	.5	.0	.0	---	---	---	10.0	7.5	8.5	18.0	10.0	14.0
27	.5	.0	.0	---	---	---	8.5	6.0	7.5	15.5	12.5	14.0
28	.5	.0	.5	---	---	---	10.0	5.0	7.0	14.0	12.0	13.0
29	---	---	---	---	---	---	12.5	4.5	8.5	14.5	11.0	12.5
30	---	---	---	---	---	---	13.5	6.0	10.0	13.5	12.0	13.0
31	---	---	---	4.0	2.5	3.0	---	---	---	13.0	11.5	12.0
MONTH	.5	.0	.5	7.0	.0	1.5	13.5	.0	5.0	18.0	6.5	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	12.5	11.5	12.0	18.5	12.0	15.0	18.0	13.5	15.5	13.5	11.0	12.0
2	18.0	11.5	14.5	18.0	11.5	15.0	17.0	13.5	15.5	15.5	11.0	13.0
3	14.5	10.5	12.5	15.0	11.5	13.0	18.5	14.0	16.0	15.5	12.0	13.5
4	15.0	10.5	13.0	17.5	10.5	13.5	16.5	14.5	15.5	13.0	10.5	11.5
5	14.0	11.5	12.0	19.0	12.0	15.5	19.0	14.0	16.5	14.5	9.0	11.5
6	11.5	11.0	11.0	20.0	13.5	16.5	17.0	14.5	16.0	15.0	9.5	12.5
7	13.0	11.0	12.0	19.5	14.0	17.0	16.5	11.5	14.0	14.5	10.5	12.5
8	15.0	10.5	12.5	21.0	15.5	18.0	14.5	11.0	12.5	13.0	10.5	11.0
9	18.0	10.5	14.0	21.0	15.0	17.5	14.5	11.0	12.5	14.5	9.5	11.5
10	17.0	11.5	14.0	19.5	14.0	17.0	16.0	11.0	13.5	15.0	10.0	12.5
11	15.0	11.5	13.0	16.5	14.5	15.5	14.5	12.5	13.5	15.0	10.0	12.5
12	13.0	10.0	11.5	20.5	14.5	17.0	15.0	11.5	13.5	15.0	10.5	13.0
13	12.0	9.5	10.5	19.5	14.5	17.0	15.0	12.0	13.5	15.0	10.5	13.0
14	14.0	9.5	11.5	19.0	15.0	17.0	14.5	10.5	12.5	14.5	10.5	12.5
15	16.0	10.0	13.0	19.5	15.0	17.0	16.0	11.5	14.0	13.5	10.5	11.5
16	15.5	12.0	14.0	18.5	13.5	16.0	18.0	12.5	15.0	13.5	10.5	12.0
17	16.5	12.5	14.5	18.0	13.0	15.5	16.0	13.5	14.5	14.0	10.5	12.0
18	19.0	12.0	15.0	19.0	13.0	16.0	18.0	12.0	14.5	11.5	9.0	10.5
19	17.0	13.5	15.5	17.5	13.0	16.0	17.0	12.5	14.5	12.5	8.0	10.5
20	17.5	12.5	15.0	16.0	12.0	14.0	14.5	11.0	12.0	11.0	8.5	9.5
21	18.0	11.5	14.5	19.5	12.0	15.5	14.0	10.0	12.0	10.5	9.0	10.0
22	17.0	12.0	14.5	20.0	13.5	16.5	14.5	9.5	11.5	11.0	9.5	10.5
23	16.5	12.0	14.5	18.0	14.5	16.0	14.5	11.5	13.0	12.5	10.0	11.0
24	17.0	11.0	14.0	20.0	13.0	16.5	17.5	12.0	14.5	13.0	10.0	11.5
25	18.0	11.0	14.5	19.0	13.5	16.5	15.0	11.0	12.5	12.0	9.5	11.0
26	16.0	13.5	15.0	19.5	14.5	17.0	16.0	10.5	13.0	12.0	9.0	10.5
27	14.5	12.5	13.5	18.5	14.5	16.5	14.0	11.0	12.5	12.5	10.5	11.5
28	18.0	12.5	15.5	16.5	13.5	15.0	14.5	10.0	12.0	12.5	9.5	11.0
29	15.5	13.5	14.5	19.5	13.0	16.0	14.0	9.0	11.5	12.0	10.5	11.5
30	18.5	13.0	15.5	16.5	13.5	15.0	14.5	10.0	12.5	13.0	10.5	11.5
31	---	---	---	17.0	13.5	15.0	13.5	10.5	12.5	---	---	---
MONTH	19.0	9.5	13.5	21.0	10.5	16.0	19.0	9.0	13.5	15.5	8.0	11.5

01437500 NEVERSINK RIVER AT GODEFFROY, NY

LOCATION.--Lat 41°26'28", long 74°36'07", Orange County, Hydrologic Unit 02040104, on right bank just upstream from highway bridge on Graham Road, 0.5 mi (0.8 km) downstream from Basher Kill, 0.8 mi (1.3 km) southeast of Godeffroy, 1.7 mi (2.7 km) south of Cuddebackville, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--307 mi^2 (782 km^2), revised.

PERIOD OF RECORD.--August to October 1903, July 1937 to current year. Gage heights and discharge measurements, August 1909 to April 1914. Twice-daily figures of discharge, January 1911 to December 1912, which do not represent daily mean discharges because of diurnal fluctuation. August to October 1903, published as "Navesink River at Godeffroy, NY."

REVISED RECORDS.--WSP 821: Drainage area. WSP 1502: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 459.66 ft (140.104 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Apr. 30, 1914, nonrecording gages at same site (August to October 1903 at datum 0.98 ft or 0.299 m higher).

REMARKS.--Records fair except those for winter periods, which are poor. Prior to 1949, diurnal fluctuation at low and medium flow caused by powerplant at Cuddebackville. Subsequent to June 1953, entire flow from 91.8 mi^2 (237.8 km^2) of drainage area controlled by Neversink Reservoir (see Reservoirs in Delaware River Basin). Part of flow diverted for New York City municipal supply. Remainder of flow (except for conservation releases and spill), impounded for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft^3/s (935 m^3/s) Aug. 19, 1955, gage height, 12.49 ft (3.087 m), from rating curve extended above 11,000 ft^3/s (312 m^3/s) on basis of slope-area measurement of peak flow; practically no flow several times in July 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,540 ft^3/s (100 m^3/s) Apr. 18, gage height 6.43 ft (1.960 m); minimum discharge, 82 ft^3/s (2.32 m^3/s) Oct. 1, gage height, 3.14 ft (0.957 m), minimum gage height, 3.09 ft (0.942 m) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	197	186	220	220	230	1530	594	461	406	165	117
2	159	179	279	249	290	230	1180	540	622	322	134	122
3	140	165	347	212	513	210	1150	503	541	298	128	143
4	122	149	302	389	1100	190	2070	480	465	288	125	128
5	114	146	275	1210	950	230	1340	421	446	261	149	117
6	118	165	253	899	760	250	1150	390	545	228	140	119
7	143	183	216	799	660	273	999	377	971	208	131	119
8	134	179	240	600	560	329	882	348	752	197	149	114
9	117	165	220	450	500	280	800	335	635	183	183	117
10	111	155	186	390	450	300	716	319	540	172	216	114
11	109	149	183	340	420	295	735	296	473	162	172	114
12	106	146	197	310	380	421	730	281	441	169	143	111
13	111	140	179	200	350	648	679	283	545	159	128	109
14	119	134	162	310	310	753	735	274	961	149	117	109
15	114	140	186	310	345	802	669	251	709	143	117	111
16	114	169	186	280	367	765	604	236	576	140	106	125
17	119	186	183	250	412	742	595	226	750	143	101	114
18	125	179	193	230	379	732	2520	221	635	146	103	101
19	143	165	140	210	360	898	1520	211	522	140	96	101
20	149	172	130	200	354	939	1560	318	471	172	94	103
21	134	228	140	200	347	1070	1210	281	416	176	111	114
22	125	204	160	190	336	1100	937	268	372	131	103	119
23	128	201	212	180	319	1160	694	289	446	125	98	146
24	186	201	317	170	290	1180	569	343	389	119	96	140
25	179	183	284	170	270	1240	486	332	332	114	137	122
26	179	186	240	170	250	1690	493	299	298	111	162	125
27	220	193	232	170	240	1470	1030	271	302	109	137	190
28	357	186	228	160	240	1110	1120	256	302	143	134	249
29	284	176	220	170	---	950	811	419	423	169	125	172
30	236	162	197	160	---	859	669	454	631	131	122	165
31	236	---	179	150	---	969	---	429	---	137	117	---
TOTAL	4732	5183	6652	10048	11972	22315	30183	10545	15972	5551	4039	3850
MEAN	153	173	215	324	428	720	1006	340	532	179	130	128
MAX	357	228	347	1210	1100	1690	2520	594	971	406	216	249
MIN	101	134	130	150	220	190	486	211	298	109	94	101

CAL YR 1981 TOTAL 107047 MEAN 293 MAX 4360 MIN 62
WTR YR 1982 TOTAL 131042 MEAN 359 MAX 2520 MIN 94

01438500 DELAWARE RIVER AT MONTAGUE, NJ

LOCATION.--Lat 41°18'33", long 74°47'44", Sussex County, Hydrologic Unit 02040104, on right bank 0.4 mi (0.6 km) upstream from toll bridge on U.S. Route 206 at Montague, 0.8 mi (1.3 km) downstream from Sawkill Creek, and at mile 246.3 (396.3 km). Water-quality samples collected from toll bridge.

DRAINAGE AREA.--3,480 mi² (9,013 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1936 to September 1939 (gage heights only, published as "at Milford, PA"). October 1939 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WDR-NJ-81-2: 1980.

GAGE.--Water-stage recorder. Datum of gage is 369.93 ft (112.755 m) National Geodetic Vertical Datum of 1929. Prior to Feb. 9, 1940, nonrecording gage on upstream side of left span of subsequently dismantled bridge at present site at datum 70 ft (21.3 m) lower.

REMARKS.--Water-discharge records excellent except for winter months, which are good. Diurnal fluctuations at medium and low flow caused by powerplants on tributary streams. Flow regulated by Lake Wallenpaupack and by Pepacton, Cannonsville, Swinging Bridge, Toronto, Cliff Lake, and Neversink Reservoirs (see Delaware River Basin, reservoirs in) and smaller reservoirs. Diversion from Pepacton, Cannonsville, and Neversink Reservoirs (see Delaware River Basin, diversions).

AVERAGE DISCHARGE.--43 years, 5,839 ft³/s (165.4 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 250,000 ft³/s (7,080 m³/s) Aug. 19, 1955, gage height, 35.15 ft (10.714 m), from rating curve extended above 90,000 ft³/s (2,550 m³/s) on basis of flood-routing study; minimum, 382 ft³/s (10.8 m³/s) Aug. 24, 1954, gage height, 3.83 ft (1.167 m), minimum daily, 412 ft³/s (11.7 m³/s) Aug. 23, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1903, reached a stage of 35.5 ft (10.82 m) from floodmark, present datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,200 ft³/s (997 m³/s) Apr. 4, gage height, 13.54 ft (4.127 m), maximum gage height 18.82 ft (5.736 m) Feb. 4, ice jam; minimum discharge, 1,060 ft³/s (30.0 m³/s) Oct. 1, gage height, 4.56 ft (1.390 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	4150	2000	2700	1950	2300	16900	7160	2780	6010	1650	1610
2	1970	3470	2420	2800	2800	2800	19200	6320	5010	5030	1650	1900
3	2090	3950	3570	3100	4500	2600	15600	6210	6260	4280	1600	1960
4	1680	3600	4120	3600	8000	2300	29200	6230	5440	3530	1630	2070
5	1670	3390	3570	9400	16000	2700	24400	5660	4820	3140	1560	1970
6	1770	3400	3170	10500	12000	2400	18700	5060	4830	2800	1720	1930
7	1610	3680	2750	8370	9200	2600	15600	4770	6750	3200	1770	1830
8	1510	3310	2700	6820	7200	2800	13100	4200	7720	2960	1800	1790
9	2000	2750	2830	5600	6000	2700	11500	3340	6810	2680	2030	1830
10	1910	2430	2570	4500	5400	2600	10400	3110	5690	2400	2480	2000
11	1770	3070	2490	3200	4800	2600	10200	3470	4980	1710	2300	2020
12	1620	2900	2320	3100	4200	3200	9930	3180	4620	1790	2030	2050
13	1690	2860	2070	3400	4100	5000	9420	2810	4710	2420	1890	2140
14	1770	2780	1840	3700	3900	7000	9550	2630	7760	2560	1720	2090
15	1670	1940	2000	3700	3600	9400	9400	2390	7370	2320	1720	1820
16	1650	2060	2100	3400	3600	9800	9090	2050	6000	2320	1640	1870
17	1730	2120	2400	3100	4300	9000	8760	1870	5780	2220	1580	1800
18	1670	2230	2200	3000	4200	8400	19100	1800	5770	1730	1760	1910
19	1500	2260	1950	2900	4000	10500	22500	2030	5270	1760	1820	1870
20	1380	2360	1400	2700	3800	11400	16800	2160	4630	2310	1850	1820
21	1700	2870	1300	2800	3200	12400	14000	2370	3900	2380	1760	1850
22	1710	3220	1400	2600	3200	13600	11700	1960	3750	2360	1800	1880
23	1710	2890	2800	2700	3400	13900	10100	1810	3720	2120	1670	1950
24	1600	2810	3300	2600	3300	13400	9230	2080	3700	1940	1750	1870
25	1270	2740	4800	2200	3200	14900	8580	2910	3210	1600	1900	1730
26	1780	2550	4000	2400	2900	20400	8110	2840	2860	1510	1990	1790
27	2080	2230	3400	2400	2600	22900	9990	2550	2290	1870	1450	1950
28	5570	2150	3200	2300	2200	15400	10900	2490	2230	1920	1800	1810
29	9930	2140	3500	2200	---	11900	9530	2890	2980	2050	1790	1630
30	6410	2020	2900	2000	---	10500	8090	2830	5120	1780	1710	1920
31	4810	---	2600	1700	---	10400	---	2750	---	1520	1640	---
TOTAL	73000	84330	83670	115490	137550	261800	399580	103930	146760	78220	55460	56660
MEAN	2355	2811	2699	3725	4913	8445	13320	3353	4892	2523	1789	1889
MAX	9930	4150	4800	10500	16000	22900	29200	7160	7760	6010	2480	2140
MIN	1270	1940	1300	1700	1950	2300	8090	1800	2230	1510	1450	1610

CAL YR 1981 TOTAL 1342320 MEAN 3678 MAX 47000 MIN 1200
WTR YR 1982 TOTAL 1596450 MEAN 4374 MAX 29200 MIN 1270

RESERVOIRS IN DELAWARE RIVER BASIN

01416900 PEPACTON RESERVOIR.--Lat 42°04'38", long 74°58'04", Delaware County, Hydrologic Unit 02040102, near
release chamber at Downsville Dam on East Branch Delaware River, and 1.6 mi (2.6 km) east of Downsville, N.Y.
DRAINAGE AREA, 371 mi^2 (961 km^2). PERIOD OF RECORD, September 1954 to current year. GAGE, water-stage recorder.
Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).
Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 15, 1954. Usable capacity 140,190
mil gal (530.6 hm^3) between minimum operating level, elevation, 1,152.0 ft (351.13 m) and crest of spillway,
elevation, 1,280.0 ft (390.14 m). Capacity: at crest of spillway 149,700 mil gal (566.6 hm^3), at minimum op-
erating level, 9,609 mil gal (36.37 hm^3), at sill of diversion tunnel, elevation, 1,143.0 ft (348.39 m), 6,098
mil gal (23.08 hm^3); in dead storage below release outlet, elevation, 1,126.50 ft (343.357 m), 1,898 mil gal
(7.184 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through
East Delaware Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin (see elsewhere in this sec-
tion), for water supply to City of New York; for release during periods of low flow in the lower Delaware River
basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Jan. 6,
1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection,
City of New York.
EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 154,027 mil gal (583.0 hm^3) Apr. 5, 1960, eleva-
tion, 1,282.27 ft (390.836 m), minimum observed (after first filling), 9,575 mil gal (36.24 hm^3) Dec. 26, 1964,
elevation, 1,151.92 ft (351.105 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 150,780 mil gal (570.7 hm^3) Apr. 25, elevation, 1,280.53 ft
(390.306 m), minimum, 76,020 mil gal (287.7 hm^3) Oct. 26, elevation, 1,232.08 ft (375.538 m).

01424997 CANNONSVILLE RESERVOIR.--Lat 42°03'46", long 75°22'29", Delaware County, Hydrologic Unit 02040101, in
emergency gate tower at Cannonsville Dam on West Branch Delaware River, and 1.8 mi (2.9 km) southeast of
Stilesville, N.Y. DRAINAGE AREA, 454 mi^2 (1,176 km^2). PERIOD OF RECORD, October 1963 to current year. REVISED
RECORDS, WRD NY 1972: 1966. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of
1929 (levels by Board of Water Supply, City of New York).
Reservoir is formed by an earthfill rockfaced dam. Storage began Sept. 30, 1963. Usable capacity 95,706 mil gal
(362.2 hm^3) between minimum operating level, elevation, 1,040.0 ft (316.99 m) and crest of spillway, elevation,
1,150.0 ft (350.52 m). Capacity, at crest of spillway, 98,618 mil gal (373.3 hm^3); at minimum operating level,
2,912 mil gal (11.02 hm^3), at mouth of inlet channel to diversion tunnel, elevation, 1,035.0 ft (315.47 m),
1,892 mil gal (7.161 hm^3), in dead storage below release outlet elevation, 1,020.5 ft (311.05 m), 328 mil gal
(1.241 hm^3). Figures given herein represent total contents. Impounded water is diverted for New York City water
supply via West Delaware Tunnel to Rondout Reservoir in Hudson River basin (see elsewhere in this section); is
released in Delaware River for downstream low flow augmentation, as directed by the Delaware River Master; and is
released for conservation flow in the Delaware River. No diversion prior to January 29, 1964. Records furnished
by Bureau of Water Resources Development, City of New York.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 108,116 mil gal (409.2 hm^3) Mar. 15, 1977, elevation,
1,155.85 ft (352.303 m); minimum observed (after first filling), 11,901 mil gal (45.05 hm^3) Nov. 7, 1968, elevation,
1,066.24 ft (324.990 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 102,352 mil gal (387.4 hm^3) Apr. 5, elevation, 1,152.32 ft
(351.227 m), minimum, 30,908 mil gal (117.0 hm^3) Oct. 23, elevation, 1,094.25 ft (333.527 m).

01433000 SWINGING BRIDGE RESERVOIR.--Lat 41°34'25", long 74°47'00", Sullivan County, Hydrologic Unit 02040104, at
dam on Mongaup River, and 1.8 mi (2.9 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 118 mi^2 (306 km^2) ex-
cluding Cliff Lake, Lebanon Lake, and Toronto Reservoir. PERIOD OF RECORD, January 1930 to current year.
REVISED RECORDS, WSP 1552: 1951-54. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical
Datum of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on
zero storage at minimum operating pool level, 1,010 ft (308 m).
Reservoir is formed by an earthfill dam. Storage began Jan. 19, 1930. Usable capacity, 1,436.6 mil ft^3
(40.7 hm^3) between elevations 1,010.0 ft (307.85 m), minimum operating pool, and 1,071.2 ft (326.50 m), top of
flashboards. Capacity below elevation 1,010.0 ft (307.85 m), minimum operating pool, about 212.7 mil ft^3 (6.02
hm^3). Reservoir is used for storage of water for power. Figures given herein represent contents above 1,010.0
ft (307.85 m). Water is received from Cliff Lake, Lebanon Lake, and Toronto Reservoir. Records furnished by
Orange and Rockland Utilities, Inc.
EXTREMES FOR PERIOD OF RECORD: Maximum contents, 1,461.6 mil ft^3 (41.4 hm^3) Mar. 14, 1977, elevation,
1,071.8 ft (326.68 m), minimum (after first filling), -141.4 mil ft^3 (4.00 hm^3) Dec. 2, 1938, elevation, 987.5 ft
(300.99 m).
EXTREMES FOR CURRENT YEAR: Maximum contents, 1,307 mil ft^3 (37.0 hm^3) Apr. 5, elevation, 1,068.0 ft
(325.53 m), minimum, 869.9 mil ft^3 (24.6 hm^3) Mar. 12, elevation, 1,055.8 ft (321.81 m).

01433100 TORONTO RESERVOIR.--Lat 41°37'15", long 74°49'55", Sullivan County, Hydrologic Unit 02040104, at dam on
Black Lake Creek, and 2.5 mi (4.0 km) southeast of village of Black Lake, N.Y. DRAINAGE AREA, 23.2 mi^2 (60.1
km^2). PERIOD OF RECORD, January 1926 to current year. REVISED RECORDS, WSP 1552: 1951-54. WSP 1702: 1959 (M).
GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Orange and Rockland
Utilities, Inc.). All capacity figures given herein are based on zero storage at minimum operating pool level,
1,165.0 ft (355.09 m).
Reservoir is formed by an earthfill dam completed July 24, 1926. Storage began Jan. 13, 1926. Usable
capacity 1,098.2 mil ft^3 (31.1 hm^3) between elevations 1,165.0 ft (355.09 m), minimum operating pool, and 1,220.0
ft (371.86 m), top of permanent flashboards. Capacity below elevation 1,165.0 ft (355.09 m), minimum operating
pool, about 26.8 mil ft^3 (0.759 hm^3). Reservoir is used for storage of water for power. Figures given herein
represent contents above 1,165.0 ft (355.09 m). Records furnished by Orange and Rockland Utilities, Inc.
EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,171.2 mil ft^3 (33.2 hm^3) July 20, 1945, eleva-
tion, 1,222.0 ft (372.47 m); minimum observed (after first filling), -26.8 mil ft^3 (0.759 hm^3) Nov. 15, 1928,
elevation, 1,144.5 ft (348.84 m).
EXTREMES FOR CURRENT YEAR: Maximum contents observed, 1,063 mil ft^3 (30.1 hm^3) June 25, elevation,
1,219.0 ft (371.55 m); minimum observed, 214.7 mil ft^3 (6.08 hm^3) Sept. 30, elevation, 1,185.2 ft (361.25 m).

01433200 CLIFF LAKE.--Lat 41°35'00", long 74°47'40", Sullivan County Hydrologic Unit 02040104, at dam on Black
Lake Creek, and 2.5 mi (4.0 km) northwest of Fowlersville, N.Y. DRAINAGE AREA, 6.46 mi^2 (16.7 km^2), excluding
area above Toronto Reservoir. PERIOD OF RECORD, January 1939 to current year. REVISED RECORDS, WSP 1552:
1951-54. WDR NY-75-1: 1974(m). GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum
of 1929 (levels by Orange and Rockland Utilities, Inc.). All capacity figures given herein are based on zero
storage at minimum operating pool level, 1,043.3 ft (318.00 m).
Reservoir is formed by a concrete gravity-type dam. Storage began Jan. 6, 1939. Usable capacity, 136.06 mil
ft^3 (3.85 hm^3) between elevations 1,043.3 ft (318.00 m), minimum operating pool, and 1,072.0 ft (326.75 m), top
of permanent flashboards. Capacity below elevation 1,043.3 ft (318.00 m), minimum operating pool, about 6.54
mil ft^3 (0.185 hm^3). Reservoir is used for storage of water for power. Water is received from Toronto and
Lebanon Lake reservoirs and is discharged through a tunnel into Swinging Bridge Reservoir. Figures given herein
represent contents above 1,043.3 ft (318.00 m). Records furnished by Orange and Rockland Utilities, Inc.
EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 145.44 mil ft^3 (4.12 hm^3) July 30, 31, 1945, eleva-
tion, 1,073.1 ft (327.08 m), minimum observed (after first filling), about -6.54 mil ft^3 (0.185 hm^3) Mar. 16, 1963,
elevation, 1,038.0 ft (316.38 m).
EXTREMES FOR CURRENT YEAR: Maximum contents observed, 121.3 mil ft^3 (3.44 hm^3) July 9, elevation, 1,070.2 ft
(326.20 m); minimum observed, 34.1 mil ft^3 (0.966 hm^3) Mar. 12, elevation, 1,055.6 ft (321.75 m).

RESERVOIRS IN DELAWARE RIVER BASIN--Continued

01435900 NEVERSINK RESERVOIR.--Lat 41°49'40", long 74°38'21", Sullivan County, Hydrologic Unit 02040104, at a gatehouse at Neversink Dam on Neversink River, and 2 mi (3 km) southwest of Neversink, N.Y. DRAINAGE AREA, 91.8 mi^2 (238 km^2). PERIOD OF RECORD, June 1953 to current year. GAGE, nonrecording gage read daily at 0900. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Board of Water Supply, City of New York).

Reservoir is formed by an earthfill rockfaced dam. Storage began June 2, 1953. Usable capacity 34,941 mil gal (132.25 hm^3) between minimum operating level, elevation, 1,319.0 ft (402.03 m) and crest of spillway, elevation, 1,440.0 ft (438.91 m). Capacity at crest of spillway 37,146 mil gal (140.6 hm^3); at minimum operating level, 2,205 mil gal (8.35 hm^3); dead storage below diversion sill and outlet sill, elevation 1,314.0 ft (400.51 m), 1,680 mil gal (6.36 hm^3). Figures given herein represent total contents. Reservoir impounds water for diversion through Neversink-Grahamsville Tunnel to Rondout Reservoir on Rondout Creek, in Hudson River basin, for water supply of City of New York (see elsewhere in this section); for release during periods of low flow in the lower Delaware River basin, as directed by the Delaware River Master; and for conservation release. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 37,978 mil gal (143.7 hm^3) Apr. 25, 1961, elevation, 1,441.67 ft (439.421 m), minimum observed (after first filling), 1,985 mil gal (7.513 hm^3) Nov. 25, 1964, elevation, 1,316.98 ft (401.415 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 37,419 mil gal (141.6 hm^3) Apr. 20, elevation, 1,440.55 ft (439.080 m), minimum observed, 18,196 mil gal (68.9 hm^3) Oct. 26, elevation, 1,393.68 ft (424.794 m).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	01416900 Pepacton Reservoir ‡‡			01424997 Cannonsville Reservoir ‡‡			01433000 Swinging Bridge Reservoir ‡		
Sept. 30	1,235.03	79,700		1,100.91	37,083		1,064.9	1,188	
Oct. 31	1,236.40	81,450	+ 87.3	1,103.78	39,926	+ 142	1,064.5	1,173	- 5.6
Nov. 30	1,236.59	81,694	+ 12.6	1,111.52	48,079	+ 420	1,060.6	1,031	- 54.5
Dec. 31	1,237.31	82,625	+ 46.5	1,117.22	54,539	+ 322	1,059.7	1,000	- 11.7
CAL YR 1981	-	-	+ 98.0	-	-	+ 65.3	-	-	- 3.0
Jan. 31	1,244.92	92,885	+ 512	1,118.37	55,881	+ 67.0	1,057.6	936	- 24.1
Feb. 28	1,256.00	109,176	+ 900	1,130.14	70,441	+ 805	1,057.8	936	0.0
Mar. 31	1,266.23	125,618	+ 821	1,147.90	95,424	+1,247	1,067.3	1,280	+129
Apr. 30	1,280.33	150,410	+1,279	1,150.90	100,066	+ 239	1,065.4	1,206	- 28.2
May 31	1,276.61	143,621	- 339	1,149.70	98,162	- 95.0	1,061.8	1,074	- 49.5
June 30	1,279.38	148,659	+ 260	1,151.13	100,436	+ 117	1,064.6	1,176	+ 39.5
July 31	1,274.42	139,712	- 447	1,142.89	87,963	- 623	1,059.2	983	- 72.2
Aug. 31	1,266.26	125,669	- 701	1,127.68	67,301	-1,031	1,062.5	1,099	+ 43.4
Sept. 30	1,257.39	111,335	- 739	1,109.29	45,642	-1,117	1,060.8	1,038	- 23.4
WTR YR 1982	-	-	+ 134	-	-	+ 36.3	-	-	- 4.7

Date	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	Elevation (feet)	Contents (million gallons)	Change in contents (equivalent in ft^3/s)
	01433100 Toronto Reservoir ‡			01433200 Cliff Lake ‡			01435900 Neversink Reservoir ‡‡		
Sept. 30	1,190.7	312		1,066.0	90.3		1,398.70	19,889	
Oct. 31	1,185.5	220	- 34.3	1,065.0	83.7	- 2.5	1,397.29	19,404	- 24.2
Nov. 30	1,188.2	266	+ 17.9	1,060.4	56.1	-10.6	1,397.58	19,503	+ 5.1
Dec. 31	1,191.2	321	+ 20.6	1,059.7	52.4	- 1.4	1,397.27	19,397	- 5.3
CAL YR 1981	-	-	+ 7.0	-	-	- 0.4	-	-	+ 62.2
Jan. 31	1,195.4	409	+ 32.7	1,058.0	44.2	- 3.1	1,400.40	20,483	+ 54.2
Feb. 28	1,200.0	516	+ 44.4	1,058.2	45.1	+ 0.4	1,412.36	24,941	+246
Mar. 31	1,207.3	706	+ 70.9	1,067.8	103	+21.6	1,421.07	28,491	+177
Apr. 30	1,215.9	958	+ 97.2	1,065.8	88.9	- 5.4	1,439.05	36,678	+422
May 31	1,217.0	995	+ 13.6	1,062.0	65.1	- 8.9	1,429.83	32,324	-217
June 30	1,218.0	1,029	+ 13.1	1,066.7	95.1	+11.6	1,434.55	34,512	+113
July 31	1,209.0	753	-103	1,064.9	83.0	- 4.5	1,428.90	31,902	-130
Aug. 31	1,194.4	387	-137	1,066.4	93.0	+ 3.7	1,420.72	28,344	-178
Sept. 30	1,185.2	215	- 66.5	1,060.9	58.8	-13.2	1,411.56	24,628	-192
WTR YR 1982	-	-	- 3.1	-	-	- 1.0	-	-	+ 20.1

‡ Elevation at 2400 hours.
‡‡ Elevation at 0900 hours on first day of following month.

DIVERSIONS FROM DELAWARE RIVER BASIN

01415200 Diversion from Pepacton Reservoir (see preceding pages) on East Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 6, 1955. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, WRD NY 1971: 1970. WRD NY 1981: 1980.

014239000 Diversion from Cannonsville Reservoir (see preceding pages) on West Branch Delaware River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Jan. 29, 1964. Records furnished by Bureau of Water Resources Development, City of New York.
REVISED RECORDS, WRD NY 1981: 1980.

01435800 Diversion from Neversink Reservoir (see preceding pages) on Neversink River to Rondout Reservoir on Rondout Creek, in Hudson River basin, for municipal supply of City of New York. No diversion prior to Dec. 3, 1953. Records furnished by Bureau of Water Resources Development and Department of Environmental Protection, City of New York.
REVISED RECORDS, Revised figures of diversion for the water years 1976 and 1977, superseding those published in the reports for 1976 and 1977 are given herein.

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEARS 1976 AND 1977

Month	01435800 Neversink Reservoir	Month	01435800 Neversink Reservoir
October.......	211	October.......	218
November......	288	November......	250
December......	311	December......	306
CAL YR 1975	293	CAL YR 1976	290
January.......	260	January.......	256
February......	216	February......	149
March.........	272	March.........	129
April.........	281	April.........	380
May...........	434	May...........	303
June..........	286	June..........	233
July..........	408	July..........	386
August........	294	August........	321
September.....	248	September.....	232
WTR YR 1976	293	WTR YR 1977	264

DIVERSION, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Month	01415200 Pepacton Reservoir	01423900 Cannonsville Reservoir	01435800 Neversink Reservoir
October.......	693	351	144
November......	570	288	114
December......	375	267	104
CAL YR 1981	499	386	117
January.......	0.15	582	90.8
February......	0	396	11.7
March.........	352	395	103
April.........	242	2.06	277
May...........	531	234	349
June..........	368	168	98.0
July..........	693	376	157
August........	696	208	153
September.....	696	3.46	158
WTR YR 1982	438	273	148

04250750 SANDY CREEK NEAR ADAMS, NY
(National stream-quality accounting network station)

LOCATION.--Lat 43°48'48", long 76°04'30", Jefferson County, Hydrologic Unit 04140102, on left bank 250 ft (76 m) upstream from highway bridge on Liberty Street, 0.2 mi (0.3 km) downstream from tributary, 2.5 mi (4.0 km) downstream from Adams, and 10.0 mi (16.1 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--128 mi^2 (332 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 523.71 ft (159.627 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Moderate diurnal fluctuation at low flow caused by mills above station.

AVERAGE DISCHARGE.--25 years, 273 ft^3/s (7.731 m^3/s), 28.96 in/yr (736 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft^3/s (334 m^3/s) Apr. 4, 1963, gage height, 11.01 ft (3.356 m), from rating curve extended above 5,500 ft^3/s (156 m^3/s) on basis of slope-area measurement of peak flow; minimum, 1.5 ft^3/s (0.042 m^3/s) Sept. 17, 18, 1963, Aug. 19, 1964; minimum daily, 2.2 ft^3/s (0.062 m^3/s) Sept. 7, 11, 1960, Sept. 17, 1963, Aug. 16, Sept. 22, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 31	2330	*4,160	118	*7.55	2.301	Apr. 18	0230	3,050	86	6.33	1.929

Minimum discharge, 12 ft^3/s (0.340 m^3/s) Aug. 17, 18, gage height, 1.03 ft (0.314 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	377	226	140	105	70	2880	155	259	169	34	31
2	252	330	249	170	110	72	1360	139	1110	104	32	89
3	452	292	271	150	130	72	1310	127	346	82	52	102
4	438	260	268	600	170	68	1420	113	200	67	37	62
5	329	238	246	1040	250	63	838	102	158	56	30	41
6	302	480	190	653	210	68	654	98	638	47	26	33
7	936	647	164	496	190	75	461	98	535	44	22	30
8	1560	472	160	250	170	82	379	102	286	55	22	27
9	668	580	150	170	150	78	356	602	197	48	33	24
10	461	432	140	150	135	87	434	384	145	38	27	21
11	360	369	140	140	125	110	506	223	120	32	23	18
12	295	336	130	170	115	180	440	169	102	32	20	17
13	255	270	130	150	110	400	607	150	87	29	17	16
14	227	255	120	140	115	1100	869	127	80	26	16	15
15	210	256	110	130	120	946	832	109	74	23	16	93
16	193	273	100	120	125	843	1140	96	74	22	14	129
17	185	259	96	110	135	746	2010	87	72	22	13	74
18	233	251	90	100	130	692	1740	77	62	24	12	56
19	622	355	86	97	120	796	720	72	56	22	13	57
20	436	380	80	94	110	790	681	134	59	21	18	44
21	329	545	90	89	98	863	1010	139	74	19	21	35
22	390	465	100	100	92	913	557	102	115	18	17	32
23	409	359	150	96	86	778	409	142	74	16	15	38
24	409	279	200	88	80	850	389	187	63	15	28	100
25	311	238	200	80	76	1100	365	147	53	14	109	75
26	818	226	180	90	72	1500	320	111	155	15	213	53
27	1200	648	170	108	70	959	295	87	147	15	87	907
28	1780	538	160	120	68	704	248	87	85	63	53	633
29	954	354	150	115	---	607	203	200	282	152	50	342
30	605	260	140	108	---	617	178	139	394	72	41	220
31	455	---	130	100	---	1970	---	161	---	44	34	---
TOTAL	16272	11024	4816	6164	3467	18199	23611	4666	6102	1406	1145	3414
MEAN	525	367	155	199	124	587	787	151	203	45.4	36.9	114
MAX	1780	648	271	1040	250	1970	2880	602	1110	169	213	907
MIN	185	226	80	80	68	63	178	72	53	14	12	15
CFSM	4.10	2.87	1.21	1.56	.97	4.59	6.15	1.18	1.59	.36	.29	.89
IN.	4.73	3.20	1.40	1.79	1.01	5.29	6.86	1.36	1.77	.41	.33	.99

CAL YR 1981 TOTAL 117526 MEAN 322 MAX 3700 MIN 17 CFSM 2.52 IN 34.16
WTR YR 1982 TOTAL 100286 MEAN 275 MAX 2880 MIN 12 CFSM 2.15 IN 29.15

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1965, 1978 to current year.
CHEMICAL DATA: 1965, 1978 (c), 1979-80 (d), 1981-82 (c).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981-82 (b).
ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).
NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d), 1981-82 (c).
Phytoplankton--1978-80 (c), 1981 (b).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Once daily January 1978 to September 1980. Recorder July 1980 to current year.
WATER TEMPERATURES: Once daily January 1978 to September 1980. Recorder July 1980 to current year.

INSTRUMENTATION.--Specific conductance and water temperature digital recorder installed July 29, 1980 at gaging station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 540 micromhos Aug. 6 and 13, 1978; minimum recorded, 109 micromhos Dec. 3, 1980.
WATER TEMPERATURES: Maximum (1979-80 water years), 33.0°C July 24, 1979; minimum, freezing point on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 386 micromhos Sept. 15; minimum recorded, 118 micromhos Mar. 31.
WATER TEMPERATURES: Minimum, freezing point on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC												
01...	0900	212	320	7.8	.0	1.0	750	13.9	97	230	280	163
FEB												
18...	0900	129	264	7.5	.5	.70	760	16.4	114	67	170	132
MAR												
17...	1400	720	238	7.8	.5	4.6	750	12.9	91	290	600	116
MAY												
11...	1300	216	247	8.4	12.5	1.3	755	12.0	114	220	100	121
JUN												
22...	1330	108	236	8.4	15.5	1.1	750	11.1	113	K730	460	117
AUG												
03...	1415	52	282	8.5	19.0	1.6	750	10.7	117	580	140	143

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC												
01...	13	58	4.3	4.2	1.2	150	15	5.9	<.1	4.4	189	183
FEB												
18...	2.0	47	3.6	3.7	1.2	130	14	6.9	<.1	4.4	--	159
MAR												
17...	16	42	2.8	3.5	1.7	100	12	6.9	<.1	4.0	140	133
MAY												
11...	1.0	43	3.3	3.5	1.3	120	10	5.6	.1	2.2	142	141
JUN												
22...	10	41	3.5	5.4	.6	107	12	6.8	<.1	2.6	156	136
AUG												
03...	28	50	4.3	6.5	1.4	115	20	8.2	.1	4.3	189	164

K Results based on colony count outside the acceptable range (non-ideal colony count).

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
DEC												
01...	1.1	<.010	<.10	.030	.030	.030	1	<1	<100	24	<1	<1
FEB												
18...	1.0	.030	<.10	.010	<.010	<.010	--	--	--	--	--	--
MAR												
17...	1.1	.050	.47	.040	.020	<.010	1	<1	<100	21	<1	<1
MAY												
11...	.44	.070	.37	.020	.020	.010	--	--	--	--	--	--
JUN												
22...	.75	.050	.30	.120	.100	.100	1	1	<100	24	1	<1
AUG												
03...	.37	.020	.50	.060	.050	.040	1	<1	100	28	2	1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
DEC											
01...	10	10	4	<1	6	1	160	21	1	<1	10
FEB											
18...	--	--	--	--	--	--	--	--	--	--	--
MAR											
17...	10	<10	1	<1	12	2	450	38	6	3	20
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
JUN											
22...	10	<10	3	<1	3	1	120	19	3	2	30
AUG											
03...	10	<10	1	1	5	5	180	17	8	3	20

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
DEC											
01...	8	<.1	<.1	2	2	<1	<1	<1	<1	160	5
FEB											
18...	--	--	--	--	--	--	--	--	--	--	--
MAR											
17...	8	.1	<.1	2	<1	<1	<1	<1	<1	40	<4
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
JUN											
22...	3	<.1	<.1	1	<1	<1	<1	<1	<1	100	<4
AUG											
03...	5	.1	<.1	3	<1	<1	<1	<1	<1	20	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
DEC				
01...	0900	212	1	.57
FEB				
18...	0900	129	2	.70
MAR				
17...	1400	720	17	33
MAY				
11...	1300	216	3	1.7
JUN				
22...	1330	108	2	.58
AUG				
03...	1415	52	1	.14

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	320	311	316						
2	---	---	---	---	---	---						
3	---	---	---	---	---	---						
4	---	---	---	---	---	---						
5	---	---	---	---	---	---						
6	---	---	---	---	---	---						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	---	---	---	---	---	---						
11	---	---	---	---	---	---						
12	---	---	---	---	---	---						
13	---	---	---	---	---	---						
14	---	---	---	---	---	---						
15	---	---	---	---	---	---						
16	---	---	---	---	---	---						
17	---	---	---	---	---	---						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	258	216	237	---	---	---						
21	268	259	264	---	---	---						
22	263	245	252	---	---	---						
23	275	233	262	---	---	---						
24	272	234	252	---	---	---						
25	294	271	284	---	---	---						
26	297	181	254	---	---	---						
27	230	190	214	---	---	---						
28	245	189	220	---	---	---						
29	290	226	265	---	---	---						
30	315	289	300	---	---	---						
31	321	304	311	---	---	---						
MONTH	321	181	260	320	311	316						

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	169	120	152	266	257	260
2	---	---	---	---	---	---	184	170	180	269	258	263
3	274	264	268	---	---	---	195	153	181	---	---	---
4	271	241	256	---	---	---	188	152	173	---	---	---
5	241	234	237	---	---	---	194	186	189	---	---	---
6	242	234	238	---	---	---	210	195	201	---	---	---
7	249	242	245	---	---	---	225	212	217	---	---	---
8	255	247	251	---	---	---	234	215	224	---	---	---
9	259	255	256	---	---	---	237	220	229	---	---	---
10	267	259	263	---	---	---	230	208	223	---	---	---
11	270	265	267	---	---	---	221	207	217	---	---	---
12	270	266	268	---	---	---	230	220	226	268	262	265
13	271	267	269	---	---	---	---	---	---	273	257	266
14	273	269	271	---	---	---	---	---	---	278	258	270
15	293	270	275	---	---	---	---	---	---	281	262	272
16	275	254	265	---	---	---	---	---	---	285	269	279
17	253	246	250	---	---	---	---	---	---	285	267	278
18	259	254	257	241	230	236	---	---	---	287	265	279
19	268	260	264	234	228	230	---	---	---	291	276	284
20	268	264	265	241	224	235	---	---	---	276	249	256
21	268	262	265	234	218	228	---	---	---	258	246	251
22	270	263	267	234	218	225	---	---	---	272	258	264
23	273	268	271	245	233	239	219	200	211	269	230	251
24	---	---	---	243	206	233	218	197	207	242	230	235
25	295	277	287	221	196	212	221	191	202	260	244	252
26	298	279	288	200	182	190	237	221	229	272	258	264
27	293	280	289	219	197	206	244	237	241	281	271	276
28	---	---	---	234	201	217	249	243	246	280	244	272
29	---	---	---	244	202	228	254	249	251	249	232	238
30	---	---	---	246	212	236	258	252	254	269	249	259
31	---	---	---	212	118	164	---	---	---	272	235	248
MONTH	298	234	264	246	118	220	258	120	213	291	230	263

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	246	153	216	282	242	264	---	---	---	---	---	---
2	208	153	181	297	285	292	---	---	---	---	---	---
3	238	210	226	310	301	307	---	---	---	---	---	---
4	252	238	246	313	295	308	300	272	288	---	---	---
5	256	252	254	320	289	310	316	283	302	---	---	---
6	251	182	204	323	283	308	324	283	305	---	---	---
7	248	210	235	327	259	305	333	279	309	---	---	---
8	266	249	258	324	284	308	320	289	305	---	---	---
9	276	266	271	311	278	299	326	287	309	---	---	---
10	281	272	277	326	283	306	318	291	308	---	---	---
11	286	278	281	333	274	309	332	294	317	---	---	---
12	287	279	284	336	306	322	336	292	318	---	---	---
13	290	279	287	335	289	318	344	288	321	---	---	---
14	293	277	287	335	293	315	343	289	318	---	---	---
15	299	282	291	338	292	319	348	283	315	386	259	331
16	298	279	290	345	295	322	335	279	309	297	255	279
17	294	262	281	342	295	322	332	273	300	326	298	307
18	294	264	282	341	297	323	348	291	317	341	322	329
19	301	279	292	336	292	317	358	308	334	345	323	334
20	301	275	289	334	308	322	357	319	336	357	326	344
21	299	259	291	340	309	328	349	308	326	365	320	347
22	255	238	246	344	306	329	325	284	306	373	320	352
23	277	253	262	348	313	333	331	289	309	366	338	354
24	284	264	275	350	307	333	346	317	327	362	288	317
25	296	244	289	347	307	331	---	---	---	318	290	301
26	300	230	274	349	309	333	---	---	---	334	300	317
27	259	271	243	357	315	341	---	---	---	341	160	248
28	281	244	270	356	310	333	---	---	---	286	192	244
29	290	191	270	---	---	---	---	---	---	321	288	306
30	242	249	211	---	---	---	---	---	---	339	322	333
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	301	153	262	357	242	316	358	272	313	386	160	315

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	9.5	7.0	8.5						
2	---	---	---	---	---	---						
3	---	---	---	---	---	---						
4	---	---	---	---	---	---						
5	---	---	---	---	---	---						
6	---	---	---	---	---	---						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	---	---	---	---	---	---						
11	---	---	---	---	---	---						
12	---	---	---	---	---	---						
13	---	---	---	---	---	---						
14	---	---	---	---	---	---						
15	---	---	---	---	---	---						
16	---	---	---	---	---	---						
17	---	---	---	---	---	---						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	8.5	5.0	6.5	---	---	---						
21	8.5	7.5	8.0	---	---	---						
22	8.0	6.5	7.5	---	---	---						
23	7.5	6.5	7.0	---	---	---						
24	7.0	5.0	6.0	---	---	---						
25	7.0	3.5	5.0	---	---	---						
26	8.5	6.0	7.5	---	---	---						
27	12.5	8.5	10.0	---	---	---						
28	11.5	9.0	10.0	---	---	---						
29	9.0	7.0	8.0	---	---	---						
30	9.5	7.5	8.5	---	---	---						
31	9.5	7.0	8.0	---	---	---						
MONTH	12.5	3.5	7.5	9.5	7.0	8.5						

04250750 SANDY CREEK NEAR ADAMS, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	2.5	1.0	2.0	14.5	10.5	13.0
2	---	---	---	---	---	---	4.5	.0	2.0	15.0	11.0	13.0
3	.0	.0	.0	---	---	---	3.0	1.5	2.5	---	---	---
4	.0	.0	.0	---	---	---	1.5	.0	.5	---	---	---
5	.0	.0	.0	---	---	---	2.5	.0	1.0	---	---	---
6	.0	.0	.0	---	---	---	1.0	.0	.5	---	---	---
7	.0	.0	.0	---	---	---	1.5	.0	.5	---	---	---
8	.0	.0	.0	---	---	---	3.0	.0	1.0	---	---	---
9	.0	.0	.0	---	---	---	6.0	.0	2.5	---	---	---
10	.0	.0	.0	---	---	---	6.0	.5	3.0	---	---	---
11	.0	.0	.0	---	---	---	3.5	1.5	2.5	---	---	---
12	.0	.0	.0	---	---	---	3.5	1.0	2.0	16.5	13.0	14.0
13	.5	.0	.5	---	---	---	---	---	---	18.0	11.5	15.0
14	.5	.0	.5	---	---	---	---	---	---	18.0	13.0	16.0
15	.5	.0	.5	---	---	---	---	---	---	18.5	14.5	16.5
16	.5	.0	.5	---	---	---	---	---	---	16.5	15.0	15.5
17	.5	.0	.5	---	---	---	---	---	---	20.0	15.0	17.5
18	.5	.0	.5	2.0	.0	.5	---	---	---	20.0	15.5	18.0
19	.5	.0	.5	1.0	.5	.5	---	---	---	19.0	16.5	18.0
20	.5	.0	.5	3.0	.5	1.5	---	---	---	19.0	16.0	17.5
21	.5	.0	.5	1.5	.5	1.0	---	---	---	17.0	15.0	17.5
22	.5	.5	.5	2.0	.5	1.0	---	---	---	17.0	14.5	15.0
23	.5	.5	.5	4.5	.5	2.0	9.0	2.5	5.5	14.5	11.5	13.0
24	---	---	---	5.0	1.0	2.5	12.5	5.5	8.5	12.5	11.5	12.0
25	1.0	.5	.5	5.5	1.0	2.5	14.0	7.0	9.5	16.5	11.5	14.0
26	---	---	---	2.5	.5	1.5	12.0	6.0	9.0	18.0	13.0	16.5
27	---	---	---	3.5	.5	1.5	12.5	6.5	10.0	19.0	17.0	18.0
28	---	---	---	3.0	.5	1.5	13.5	7.5	11.0	18.5	15.0	17.0
29	---	---	---	4.5	.5	2.5	13.0	8.5	11.5	17.0	14.0	15.5
30	---	---	---	6.0	.5	3.0	14.0	9.0	12.0	19.0	14.0	17.5
31	---	---	---	5.5	2.5	4.0	---	---	---	17.0	15.0	16.5
MONTH	1.0	.0	.5	6.0	.0	2.0	14.0	.0	5.0	20.0	10.5	16.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	14.5	17.0	22.0	15.5	19.0	---	---	---	---	---	---
2	19.5	14.5	16.5	20.0	17.0	19.0	---	---	---	---	---	---
3	18.0	14.0	16.0	19.5	17.0	17.5	---	---	---	---	---	---
4	16.0	13.0	14.5	21.5	16.0	18.5	25.5	18.5	21.5	---	---	---
5	16.0	14.0	15.5	22.5	17.5	19.5	24.0	21.0	22.5	---	---	---
6	13.5	13.0	13.0	23.5	19.5	21.5	25.0	19.5	22.0	---	---	---
7	19.5	12.5	17.0	26.5	21.5	23.5	25.5	19.0	22.0	---	---	---
8	20.5	15.5	18.5	27.0	22.0	23.5	24.5	21.0	22.0	---	---	---
9	22.0	16.0	19.5	27.0	22.0	24.5	24.0	20.0	21.5	---	---	---
10	20.0	18.0	19.0	26.5	21.0	23.0	23.5	19.5	21.0	---	---	---
11	20.5	17.5	19.0	27.5	21.5	24.5	21.5	15.5	18.0	---	---	---
12	20.0	16.5	18.0	24.5	21.5	23.0	21.5	15.5	18.0	---	---	---
13	19.0	16.5	17.5	26.0	20.5	23.0	20.0	16.0	17.5	---	---	---
14	19.0	15.0	17.5	26.0	20.0	23.0	20.5	16.0	17.5	---	---	---
15	18.5	17.0	17.5	26.5	19.0	23.0	22.0	17.5	19.5	22.5	17.5	20.0
16	18.5	17.0	17.5	26.5	20.5	24.0	23.0	17.5	20.0	19.0	15.0	16.5
17	20.5	17.0	18.5	27.5	21.0	25.0	24.0	19.0	20.5	18.0	15.5	16.5
18	22.5	17.5	19.5	27.5	22.0	25.0	21.5	16.0	19.0	17.5	13.5	16.0
19	21.5	17.5	19.5	29.0	22.5	25.5	22.0	17.5	19.5	17.0	12.0	13.5
20	20.5	16.0	18.0	26.0	23.5	25.0	20.5	17.5	18.5	16.5	11.5	14.0
21	17.5	15.5	16.5	26.0	21.0	23.5	22.0	14.5	19.0	18.0	13.0	15.5
22	17.5	13.5	16.0	26.0	19.0	22.0	18.5	14.5	16.0	17.5	14.0	16.0
23	17.5	15.0	16.5	26.0	19.0	22.5	17.0	13.5	15.5	17.0	14.0	15.5
24	21.0	17.0	17.5	27.5	21.0	23.5	15.5	14.0	15.0	16.0	12.5	14.5
25	18.5	15.5	17.0	26.5	20.0	23.0	---	---	---	17.0	14.5	16.0
26	21.0	15.5	17.5	26.5	21.0	22.5	---	---	---	17.0	15.0	16.0
27	---	---	---	26.5	21.5	22.5	---	---	---	16.0	13.5	14.5
28	21.5	19.0	20.0	27.0	21.5	24.0	---	---	---	15.0	13.0	13.5
29	21.0	18.5	19.5	---	---	---	---	---	---	16.0	12.5	14.0
30	22.0	16.0	19.0	---	---	---	---	---	---	16.5	13.0	14.5
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	22.5	12.5	17.5	29.0	15.5	22.5	25.5	13.5	19.5	22.5	11.5	15.5

04252500 BLACK RIVER NEAR BOONVILLE, NY

LOCATION.--Lat 43°30'42", long 75°18'25", Oneida County, Hydrologic Unit 04150101, on left bank at downstream side of bridge on Moose River Road, 0.8 mi (1.3 km) upstream from Sugar River, and 2 mi (3 km) northeast of Boonville.

DRAINAGE AREA.--304 mi^2 (787 km^2), revised.

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934. WSP 1084: 1912(M), 1913, 1917-1919(M), 1922(M), 1924(M), 1926(M), 1928(M), 1930(M), 1933(M). WSP 1307: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 935.50 ft (285.140 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are fair. Occasional regulation by several headwater reservoirs. Forestport feeder diverts water from State Pond at Forestport 9 mi (14 km) upstream. That portion of diverted water which does not pass Black River Canal (flowing south), see station 04252000, returns to Black River below station through Mill Creek sluiceway. Slight diurnal fluctuation at medium and low flow caused by mill above station.

AVERAGE DISCHARGE.--71 years, 700 ft^3/s (19.82 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,800 ft^3/s (362 m^3/s) Apr. 18, 1982, gage height, 11.31 ft (3.447 m), maximum gage height, 13.10 ft (3.993 m) Feb. 21, 1981 (ice jam); minimum observed discharge, about 5 ft^3/s (0.14 m^3/s) Aug. 26, 1918, gage height, 2.40 ft (0.732 m), minimum daily, 7 ft^3/s (0.20 m^3/s) Aug. 26, 1918.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,900 ft^3/s (110 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1700	5,100	144	9.29	2.832	Apr. 18	1730	*12,800	362	*11.31	3.447

Minimum discharge, 128 ft^3/s (3.62 m^3/s) Sept. 14, gage height, 3.71 ft (1.131 m), minimum daily, 140 ft^3/s (3.96 m^3/s) Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	1320	470	400	560	370	2990	1860	880	1220	195	172
2	806	1140	520	400	720	370	3190	1690	1520	757	202	177
3	868	906	540	450	860	380	2950	1320	1700	546	278	282
4	763	769	540	700	900	390	3740	1100	1240	431	275	318
5	642	734	537	1000	900	410	3080	971	998	348	214	278
6	638	812	489	1100	860	420	2250	862	1070	307	186	240
7	1000	1100	410	1000	820	420	1560	806	919	292	164	208
8	1700	1000	481	960	760	410	1340	745	680	498	169	195
9	2030	818	464	860	680	400	1230	788	542	498	439	192
10	1620	745	431	740	620	410	1150	874	455	355	880	180
11	1010	729	440	600	600	440	1050	724	410	296	537	169
12	719	714	430	560	560	490	935	633	394	278	336	157
13	642	661	440	520	540	580	970	596	402	282	264	140
14	591	633	470	490	520	700	1390	555	386	250	221	140
15	550	614	470	480	500	780	1660	515	321	224	205	172
16	515	709	450	460	480	760	2040	489	333	205	186	192
17	515	719	431	450	470	740	3370	511	447	195	172	192
18	647	685	447	420	460	720	10300	564	555	198	162	183
19	1320	680	344	400	460	700	7960	489	468	275	157	177
20	1490	912	350	400	450	700	4660	520	418	282	183	174
21	1110	1370	360	400	450	700	4950	573	382	237	237	174
22	763	1260	400	400	440	700	4480	515	378	198	221	177
23	763	1000	500	400	430	680	3020	524	390	177	186	244
24	1080	868	640	400	430	700	2670	633	390	162	180	624
25	1040	751	580	390	410	760	3020	724	390	154	264	537
26	951	705	520	390	400	800	3270	624	398	152	443	359
27	2090	724	490	390	390	820	3400	528	476	149	378	443
28	4640	806	480	390	380	860	3140	476	406	192	271	633
29	4270	757	470	390	---	991	2500	573	568	303	217	506
30	2690	647	450	410	---	883	2100	775	1670	282	198	378
31	1690	---	410	460	---	1340	---	751	---	217	183	---
TOTAL	39858	25288	14454	16810	16050	19824	90365	23308	19586	9960	8203	8013
MEAN	1286	843	466	542	573	639	3012	752	653	321	265	267
MAX	4640	1370	640	1100	900	1340	10300	1860	1700	1220	880	633
MIN	515	614	344	390	380	370	935	476	321	149	157	140

CAL YR 1981 TOTAL 274615 MEAN 752 MAX 4870 MIN 105
WTR YR 1982 TOTAL 291719 MEAN 799 MAX 10300 MIN 140

04256000 INDEPENDENCE RIVER AT DONNATTSBURG, NY

LOCATION.--Lat 43°44'50", long 75°20'05", Lewis County, Hydrologic Unit 04150101, on right bank at downstream side of highway bridge on Donnattsburg Road at Donnattsburg, 1.2 mi (1.9 km) downstream from Chase Lake Outlet, 4.2 mi (6.8 km) northeast of Glenfield, and 5.0 mi (8.0 km) upstream from mouth.

DRAINAGE AREA.--88.7 mi^2 (230 km^2), revised.

PERIOD OF RECORD.--July 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 972.84 ft (296.522 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for winter periods, which are poor.

AVERAGE DISCHARGE.--40 years, 192 ft^3/s (5.437 m^3/s), 29.38 in/yr (746 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,530 ft^3/s (157 m^3/s) Apr. 18, 1982, gage height, 9.73 ft (2.966 m), minimum observed, 18 ft^3/s (0.51 m^3/s) Sept. 17, 1948, Aug. 4, 5, 1949, gage height, 2.85 ft (0.869 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s (34 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
Oct. 29	0100	2,390	67.7	7.41	2.259	Apr. 18	1130	*5,530	157	*9.73	2.966
Apr. 1	2230	1,320	37.4	6.06	1.847	June 3	0100	1,510	42.8	6.44	1.963

Minimum discharge, 34 ft^3/s (0.96 m^3/s) July 27, 28, gage height, 3.14 ft (0.957 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	211	319	146	94	110	68	1070	217	164	164	60	76
2	216	271	166	120	140	66	1140	200	724	114	55	85
3	271	237	168	150	160	66	815	187	1130	95	56	258
4	320	212	165	200	170	64	878	167	501	85	52	297
5	290	195	156	250	170	64	761	150	283	74	49	177
6	256	218	136	330	160	62	549	142	222	65	56	121
7	392	328	130	260	150	64	373	136	243	60	51	95
8	983	295	120	220	140	64	296	134	234	71	47	78
9	815	252	120	180	130	66	259	147	167	82	190	68
10	464	224	120	160	120	68	235	185	129	66	554	60
11	320	209	110	145	120	72	224	177	110	59	317	55
12	259	199	107	130	110	89	205	147	97	66	180	51
13	224	176	103	120	110	136	198	131	89	59	119	49
14	200	168	100	110	100	199	250	121	85	53	97	47
15	182	165	98	100	100	228	337	112	82	51	99	66
16	170	182	96	94	96	251	499	103	82	51	87	185
17	167	188	94	90	94	211	1120	97	99	47	71	170
18	167	188	93	84	92	171	3960	91	112	44	62	119
19	274	229	94	82	88	162	1580	85	91	43	53	101
20	346	277	110	78	84	166	827	103	83	48	55	83
21	289	385	140	76	84	180	903	155	80	44	87	73
22	255	363	180	74	82	197	891	134	76	42	95	65
23	251	279	160	72	80	201	520	112	85	40	78	73
24	364	217	140	72	80	197	413	110	117	39	71	274
25	318	188	130	70	78	217	438	114	97	38	110	283
26	283	174	115	72	76	332	434	110	108	37	317	190
27	725	191	110	74	74	376	397	97	153	36	246	246
28	1980	217	100	76	70	384	350	87	121	43	161	501
29	1770	199	94	78	---	358	283	85	108	93	124	343
30	708	171	92	80	---	290	243	172	192	108	103	228
31	419	---	90	84	---	410	---	164	---	74	87	---
TOTAL	13889	6916	3783	3825	3068	5479	20448	4172	5864	1991	3789	4517
MEAN	448	231	122	123	110	177	682	135	195	64.2	122	151
MAX	1980	385	180	330	170	410	3960	217	1130	164	554	501
MIN	167	165	90	70	70	62	198	85	76	36	47	47
CFSM	5.05	2.60	1.38	1.39	1.24	2.00	7.69	1.52	2.20	.72	1.38	1.70
IN.	5.82	2.90	1.59	1.60	1.29	2.30	8.58	1.75	2.46	.83	1.59	1.89

CAL YR 1981 TOTAL 83459 MEAN 229 MAX 1980 MIN 36 CFSM 2.58 IN 35.00
WTR YR 1982 TOTAL 77741 MEAN 213 MAX 3960 MIN 36 CFSM 2.40 IN 32.60

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'50", long 75°03'05", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam on Beaver River, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--172 mi^2 (445 km^2).

PERIOD OF RECORD.--May 1908 to current year. Prior to February 1925, month end contents only, published in WSP 1307. February 1925 to September 1937, published in WSP 824.

GAGE.--Nonrecording gage read once daily and prior to reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912.

REMARKS.--Reservoir originally formed about 1885; enlarged at various times and in 1924 enlarged to a usable capacity of 4,623 mil ft^3 (131 hm^3) between elevations 1,650.3 ft (503.01 m) and 1,679.3 ft (511.85 m) (top of 24-inch flashboards in place throughout year). Elevation of gate sill of lowest outlet, 1,642.3 ft (500.57 m). Capacity below elevation 1,650.3 ft (503.01 m), 90 mil ft^3 (2.55 hm^3), is included in records presented herein, but is not ordinarily available for release. Reservoir is used to regulate flow of Beaver and Black Rivers for flood control, power development, and general public welfare.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 1,680.08 ft (512.088 m) May 20, 1969, contents, 4,939 mil ft^3 (140 hm^3); minimum observed since first filling, 1,644.80 ft (501.335 m) Mar. 25-27, 1949, contents, 8 mil ft^3 (0.227 hm^3).

EXTREMES FOR CURRENT YEAR.--Maximum observed elevation, 1,678.85 ft (511.713 m) Oct. 31, contents, 4,583 mil ft^3 (130 hm^3); minimum observed, 1,660.79 ft (506.209 m) Mar. 25, contents, 917 mil ft^3 (26.0 hm^3).

Capacity table, current year (elevation, in feet, and contents, in millions of cubic feet)

1,658.0	604	1,670.0	2,431
1,660.0	821	1,675.0	3,556
1,665.0	1,518	1,680.0	4,916

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
INSTANTANEOUS OBSERVATIONS AT 0800

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1675.67	1678.84	1677.58	1674.06	1669.90	1663.89	1662.34	1677.78	1675.87	1676.65	1673.80	1672.03
2	1675.73	1678.82	1677.50	1673.90	1669.73	1663.61	1663.29	1677.89	1676.23	1676.59	1673.71	1671.97
3	1675.78	1678.78	1677.44	1673.78	1669.62	1663.27	1663.94	1677.98	1676.69	1676.57	1673.67	1672.01
4	1675.83	1678.72	1677.39	1673.70	1669.50	1662.96	1664.73	1678.05	1676.86	1676.53	1673.56	1671.98
5	1675.88	1678.67	1677.31	1673.73	1669.38	1662.66	1665.37	1678.02	1676.94	1676.48	1673.47	1671.93
6	1675.93	1678.59	1677.22	1673.67	1669.28	1662.36	1665.87	1677.98	1677.08	1676.42	1673.31	1671.83
7	1676.08	1678.61	1677.14	1673.61	1669.10	1662.06	1666.24	1677.92	1677.21	1676.34	1673.13	1671.83
8	1676.50	1678.58	1677.07	1673.52	1668.91	1661.78	1666.53	1677.83	1677.29	1676.32	1672.94	1671.58
9	1676.87	1678.50	1676.99	1673.42	1668.73	1661.48	1666.81	1677.79	1677.32	1676.24	1672.96	1671.45
10	1677.08	1678.42	1676.92	1673.29	1668.53	1661.18	1667.04	1677.76	1677.30	1676.17	1672.99	1671.33
11	1677.17	1678.37	1676.84	1673.17	1668.33	1660.85	1667.25	1677.68	1677.27	1676.08	1672.89	1671.21
12	1677.23	1678.33	1676.74	1673.02	1668.13	1660.81	1667.46	1677.60	1677.25	1675.99	1672.81	1671.08
13	1677.27	1678.28	1676.64	1672.89	1667.92	1660.80	1667.63	1677.52	1677.23	1675.88	1672.76	1670.95
14	1677.24	1678.22	1676.54	1672.76	1667.70	1660.94	1667.87	1677.42	1677.22	1675.81	1672.71	1670.78
15	1677.17	1678.15	1676.42	1672.62	1667.48	1661.02	1668.13	1677.34	1677.20	1675.70	1672.63	1670.79
16	1677.12	1678.10	1676.28	1672.48	1667.28	1661.07	1668.43	1677.26	1677.17	1675.60	1672.56	1670.83
17	1677.05	1678.06	1676.15	1672.32	1667.06	1661.11	1669.03	1677.20	1677.21	1675.49	1672.49	1670.75
18	1676.92	1678.00	1676.03	1672.17	1666.83	1661.10	1671.15	1677.10	1677.19	1675.38	1672.41	1670.62
19	1676.95	1677.96	1675.85	1671.99	1666.55	1661.09	1672.48	1676.98	1677.15	1675.29	1672.27	1670.50
20	1677.01	1677.96	1675.72	1671.85	1666.32	1661.03	1673.22	1676.91	1677.06	1675.20	1672.20	1670.38
21	1676.95	1677.96	1675.58	1671.68	1666.07	1660.96	1673.96	1676.86	1677.01	1675.10	1672.14	1670.26
22	1676.93	1677.97	1675.45	1671.50	1665.81	1660.94	1674.72	1676.76	1676.97	1674.98	1672.03	1670.11
23	1676.89	1677.95	1675.34	1671.32	1665.56	1660.88	1675.22	1676.67	1676.92	1674.84	1671.90	1669.98
24	1676.92	1677.93	1675.23	1671.17	1665.24	1660.84	1675.64	1676.59	1676.90	1674.68	1671.84	1670.03
25	1676.93	1677.85	1675.08	1671.01	1665.02	1660.79	1676.08	1676.49	1676.84	1674.51	1671.78	1670.04
26	1676.94	1677.79	1674.90	1670.83	1664.72	1660.93	1676.52	1676.39	1676.84	1674.37	1671.88	1670.04
27	1677.10	1677.73	1674.76	1670.66	1664.43	1661.15	1676.95	1676.25	1676.80	1674.22	1671.97	1670.12
28	1677.71	1677.69	1674.66	1670.46	1664.15	1661.28	1677.29	1676.11	1676.74	1674.08	1672.05	1670.23
29	1678.48	1677.67	1674.54	1670.34	---	1661.36	1677.49	1676.01	1676.70	1674.07	1672.10	1670.31
30	1678.74	1677.63	1674.40	1670.14	---	1661.38	1677.64	1675.92	1676.70	1674.01	1672.14	1670.34
31	1678.85	---	1674.26	1669.96	---	1661.53	---	1675.90	---	1673.91	1672.11	---
MEAN	1676.93	1678.20	1676.13	1672.29	1667.40	1661.52	1670.21	1677.16	1676.97	1675.47	1672.62	1670.91
MAX	1678.85	1678.84	1677.58	1674.06	1669.90	1663.89	1677.64	1678.05	1677.32	1676.65	1673.80	1672.03
MIN	1675.67	1677.63	1674.26	1669.96	1664.15	1660.79	1662.34	1675.90	1675.87	1673.91	1671.78	1669.98
*	4580	4233	3351	2417	1364	1066	4263	3778	3986	3280	2870	2500
**	+321	-134	-329	-349	-435	-111	+1233	-181	+80.2	-264	-153	-143

CAL YR 1981 MEAN 1675.28 MAX 1678.85 MIN 1666.42 ** + 6.98
WTR YR 1982 MEAN 1673.02 MAX 1678.85 MIN 1660.79 ** -38.6

* Contents, in millions of cubic feet, at 2400 hours on last day of month by interpolation.
** Change in contents, equivalent in cubic feet per second.

04257000 BEAVER RIVER BELOW STILLWATER DAM, NEAR BEAVER RIVER, NY

LOCATION.--Lat 43°53'56", long 75°03'08", Herkimer County, Hydrologic Unit 04150101, in gatehouse at Stillwater Dam, 2.5 mi (4.0 km) upstream from Moshier Creek, and 7.5 mi (12.1 km) west of Beaver River Post Office.

DRAINAGE AREA.--170.6 mi^2 (442 km^2), revised.

PERIOD OF RECORD.--May 1908 to current year. Published as "at State dam, near Beaver River" prior to June 1924.

REVISED RECORDS.--WSP 714: Drainage area. WDR NY 1973: 1971.

GAGE.--Nonrecording gage read once daily and after reservoir gate changes. Datum of gage is National Geodetic Vertical Datum, adjustment of 1912. Prior to June 1, 1924, nonrecording gage at present site and datum. June 1, 1924 to Nov. 14, 1929, nonrecording gage at site 1,000 ft (305 m) downstream at same datum.

REMARKS.--Records poor. Flow regulated by Stillwater Reservoir (see station 04256500). Discharge determined from ratings for gates and spillway of Stillwater Dam applied to log of reservoir elevation and gate operation.

COOPERATION.--Records furnished by Board of Hudson River-Black River Regulating District.

AVERAGE DISCHARGE.--74 years, 380 ft^3/s (10.76 m^3/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 3,700 ft^3/s (105 m^3/s) May 3, 1926; minimum, practically no flow at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 853 ft^3/s (24.14m^3/s) Nov. 1-2, minimum daily, 10 ft^3/s (0.283 m^3/s) Oct. 7-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	279	853	621	611	686	715	157	312	418	339	405	501
2	279	853	619	608	684	729	58	317	313	307	405	607
3	279	852	618	611	683	723	59	320	182	307	405	572
4	279	849	617	613	682	716	60	589	308	307	405	501
5	279	847	616	613	677	711	62	722	308	306	552	501
6	110	845	615	613	722	704	62	720	309	370	624	500
7	10	845	614	613	721	698	62	718	310	402	623	499
8	10	844	614	612	717	692	63	717	405	401	621	498
9	138	843	612	611	715	685	63	716	453	400	620	497
10	317	710	611	604	713	677	64	715	453	400	620	495
11	318	640	611	601	710	431	64	714	453	400	621	494
12	318	638	610	600	707	310	64	712	358	398	321	493
13	317	637	609	597	703	310	64	710	310	397	320	492
14	315	635	685	596	700	310	64	639	310	397	320	262
15	514	634	632	595	696	312	64	602	310	397	319	265
16	614	632	632	594	694	313	64	601	310	397	319	518
17	614	632	630	592	692	313	64	601	310	396	318	518
18	612	631	630	588	716	313	67	601	374	395	453	517
19	611	628	627	588	726	388	69	599	407	395	472	516
20	613	627	626	587	721	469	70	598	407	395	471	515
21	611	627	625	696	718	465	71	598	407	395	470	514
22	611	626	624	708	714	464	72	598	405	409	470	513
23	611	580	623	706	710	464	72	597	404	504	469	511
24	611	624	622	704	705	464	73	596	404	546	468	511
25	611	623	621	702	700	463	74	595	404	544	467	375
26	611	622	618	700	694	463	74	663	404	543	220	361
27	613	621	617	697	689	467	74	696	404	542	52	361
28	352	620	616	598	683	470	231	695	404	540	53	362
29	454	622	615	692	---	472	310	694	404	452	53	362
30	650	622	613	690	---	349	311	468	404	408	222	362
31	783	---	612	687	---	316	---	418	---	406	369	---
TOTAL	13344	20862	19255	19627	19678	15376	2726	18841	11052	12795	12527	13993
MEAN	430	695	621	633	703	496	90.9	608	368	413	404	466
MAX	783	853	685	708	726	729	311	722	453	546	624	607
MIN	10	580	609	587	677	310	58	312	182	306	52	262

CAL YR 1981 TOTAL 162356 MEAN 445 MAX 853 MIN 10
WTR YR 1982 TOTAL 180076 MEAN 493 MAX 853 MIN 10

STREAMS TRIBUTARY TO LAKE ONTARIO

04258000 BEAVER RIVER AT CROGHAN, NY

LOCATION.--Lat 43°53'50", long 75°24'16", Lewis County, Hydrologic Unit 04150101, on left bank 1,200 ft (366 m) upstream from Black Creek, and 0.5 mi (0.8 km) west of Croghan.

DRAINAGE AREA.--291 mi^2 (754 km^2), revised.

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 806.20 ft (245.730 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. Flow regulated by Stillwater Reservoir (see station 04256500). Between Stillwater Dam and this station, flow is further regulated by several powerplant ponds. Diurnal fluctuation at low and medium flow.

AVERAGE DISCHARGE.--52 years, 595 ft^3/s (16.85 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,100 ft^3/s (144 m^3/s) May 21, 1969, gage height, 6.98 ft (2.128 m); minimum, 11 ft^3/s (0.31 m^3/s) Jan. 22, 29, Feb. 4, 1967, gage height, 0.63 ft (0.192 m); minimum daily, 22 ft^3/s (0.62 m^3/s) July 18, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,390 ft^3/s (67.7 m^3/s) Oct. 28 and Apr. 19, gage height, 4.99 ft (1.521 m); minimum, 229 ft^3/s (6.49 m^3/s) Aug. 9, gage height, 2.01 ft (0.613 m); minimum daily, 256 ft^3/s (7.25 m^3/s) May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	1070	783	798	770	706	1200	261	681	504	585	477
2	423	1020	673	765	707	642	1040	256	567	468	425	603
3	372	1000	754	791	581	874	1000	260	732	483	497	634
4	337	1010	804	791	730	710	1040	374	498	663	357	566
5	470	951	853	1040	898	650	992	614	551	599	340	333
6	496	1150	656	920	856	591	658	536	616	582	627	546
7	572	1220	724	873	855	442	558	580	595	329	547	495
8	789	1140	667	906	963	728	380	469	587	390	331	543
9	1310	1120	701	864	977	668	377	350	648	317	351	524
10	964	1080	630	919	956	647	348	565	334	257	320	505
11	791	1190	728	991	876	662	347	600	395	283	687	401
12	632	1110	625	1280	843	717	350	716	364	288	421	312
13	316	945	663	1360	859	724	634	742	382	333	290	497
14	676	640	693	910	585	744	333	775	376	272	295	489
15	752	530	717	872	820	773	426	736	341	436	357	551
16	752	607	866	858	879	802	609	494	291	503	575	592
17	752	862	877	638	879	877	701	746	356	506	490	574
18	507	931	782	720	711	919	1400	772	397	487	487	580
19	738	916	785	865	829	509	2130	750	440	545	394	347
20	669	857	526	753	740	450	1340	616	468	532	473	512
21	769	834	772	762	642	420	1140	719	465	417	436	417
22	771	911	752	811	768	844	785	664	457	398	354	566
23	801	965	778	721	860	965	787	461	412	507	503	486
24	731	942	791	782	718	970	800	671	475	673	528	528
25	835	882	759	791	807	1010	539	636	405	431	602	688
26	882	949	772	796	772	1040	779	365	411	548	848	563
27	951	963	630	825	762	801	831	442	557	478	803	634
28	2000	870	708	766	696	982	665	772	531	602	793	734
29	1990	578	672	821	---	918	529	331	514	605	741	692
30	1340	829	690	827	---	842	440	368	671	608	528	610
31	1170	---	752	645	---	963	---	419	---	604	407	---
TOTAL	25011	28072	22583	26461	22339	23590	23158	17060	14517	14648	15392	15999
MEAN	807	936	728	854	798	761	772	550	484	473	497	533
MAX	2000	1220	877	1360	977	1040	2130	775	732	673	848	734
MIN	316	530	526	638	581	420	333	256	291	257	290	312

CAL YR 1981	TOTAL 251667	MEAN 689	MAX 2000	MIN 241
WTR YR 1982	TOTAL 248830	MEAN 682	MAX 2130	MIN 256

04260500 BLACK RIVER AT WATERTOWN, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 43°59'08", long 75°55'30", Jefferson County, Hydrologic Unit 04150101, on downstream side of right abutment of Vanduzee Street Bridge at Watertown, and 3.5 mi (5.6 km) upstream from Philomel Creek. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,874 mi^2 (4,859 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1920 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WDR NY-77-1: 1974.

GAGE.--Water-stage recorder. Datum of gage is 373.88 ft (113.959 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 3, 1921, nonrecording gage, and from Sept. 3, 1921 to Mar. 15, 1977, recording gage at same site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Stillwater Reservoir (see station 04256500), Fulton Chain of Lakes, and other reservoirs. Extensive diurnal fluctuation at low and medium flow caused by mills and powerplants in and above Watertown. During canal season, water is diverted out of basin through Forestport feeder and Black River Canal (flowing south).

AVERAGE DISCHARGE.--62 years, 4,018 ft^3/s (113.8 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,600 ft^3/s (1,120 m^3/s) Mar. 16, 1977, gage height, 12.98 ft (3.956 m); minimum, 10 ft^3/s (0.28 m^3/s) Sept. 2, 1934, gage height, 0.81 ft (0.247 m) present datum; minimum daily, 137 ft^3/s (3.88 m^3/s) Sept. 4, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known, about 39,700 ft^3/s (1,120 m^3/s) Apr. 23, 1869 (from New York State Museum Bulletin 85).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 17,000 ft^3/s (480 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 30	1815	21,000	596	9.59	2.923	Apr. 20	1030	*33,700	954	*11.79	3.594
Apr. 4	0500	17,100	484	8.76	2.670						

Minimum discharge, 116 ft^3/s (3.28 m^3/s) Sept. 2, gage height, 1.27 ft (0.387 m); minimum daily, 1,050 ft^3/s (29.7 m^3/s), Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5860	14600	4220	2810	2500	2200	13200	9220	3670	4300	1390	1420
2	4950	11400	3690	2880	2600	2200	14600	7950	5110	4160	1540	1390
3	4620	9420	3590	2950	2700	2100	16500	6950	6480	3100	1390	1330
4	4710	7890	3800	3000	2900	2100	16800	6100	7090	2440	1370	2030
5	4510	6790	3920	4560	3700	2100	16100	5480	7400	2460	1360	1990
6	4260	5960	3440	5640	3800	2000	15900	4770	7600	1880	1340	1830
7	4370	6050	3350	5830	4000	2050	12700	4180	7810	1770	1230	1850
8	7370	6150	2860	5790	4000	2350	10900	3880	7010	1570	1290	1700
9	7980	6200	2880	5410	3800	2570	9290	4040	5980	1900	1350	1420
10	8340	5830	2570	4900	3600	2400	7860	4410	4820	2130	1330	1420
11	8190	5380	2410	4000	3500	2260	7090	4430	3280	1770	2590	1380
12	7430	5080	2910	3500	3300	2460	6430	4180	2860	1790	3240	1310
13	6200	4600	3050	3100	3100	2950	6030	3740	2410	1500	2250	1050
14	4950	4220	3050	3000	3020	4390	6360	3390	2410	1460	1670	1210
15	4490	3670	3000	2900	2760	5340	6850	3190	2290	1370	1250	1310
16	4100	3570	2950	2900	2800	5670	7690	2810	1950	1370	1410	1990
17	3840	4000	3100	2800	2900	5570	9750	2650	1850	1300	1560	2160
18	3460	4240	2710	2700	2800	5520	14500	2780	2060	1330	1390	1960
19	3820	4390	2570	2700	2760	5500	25800	2620	2400	1380	1280	1670
20	5450	4560	2490	2600	2710	5110	32500	2590	2270	1460	1250	1670
21	5860	5310	2380	2600	2540	5130	26700	2520	2220	1370	1070	1640
22	5860	6100	2260	2600	2590	5480	21800	2830	2280	1570	1140	1510
23	5410	6280	2650	2500	2670	6150	19000	2760	1870	1160	1220	1560
24	5360	5980	2810	2500	2850	6690	16000	2550	2030	1220	1630	1680
25	5430	5240	3690	2500	2500	7340	13400	2800	2260	1180	1620	2560
26	5960	4580	3650	2400	2400	8340	12000	2910	2120	1250	2190	2980
27	6950	4540	3260	2300	2300	8380	11600	2680	2280	1220	3120	3200
28	9030	5170	3080	2300	2300	8340	11600	2590	2520	1340	2650	6060
29	14000	4880	2960	2200	---	8410	11300	2510	2410	1540	2370	5390
30	20100	4510	2860	2200	---	8250	10600	2200	2750	1780	1870	4400
31	18800	---	2650	2300	---	9030	---	2810	---	1700	1680	---
TOTAL	211660	176590	94810	100370	83400	148380	410850	118520	109490	55770	52040	63070
MEAN	6828	5886	3058	3238	2979	4786	13700	3823	3650	1799	1679	2102
MAX	20100	14600	4220	5830	4000	9030	32500	9220	7810	4300	3240	6060
MIN	3460	3570	2260	2200	2300	2000	6030	2200	1850	1160	1070	1050

CAL YR 1981 TOTAL 1643180 MEAN 4502 MAX 28100 MIN 1010
WTR YR 1982 TOTAL 1624950 MEAN 4452 MAX 32500 MIN 1050

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-60, 1962 to current year.
CHEMICAL DATA: 1956 (e), 1959 (a), 1960 (b), 1965 (a), 1966-81 (d), 1982 (c).
MINOR ELEMENTS DATA: 1970-71 (a), 1974-79 (b), 1980 (c), 1981-82 (b).
PESTICIDE DATA: 1975-79 (b), 1980-82 (a).
ORGANIC DATA: OC--1973 (c), 1974 (a), 1975 (c), 1976-77 (b), 1978-81 (d).
PCB--1978-79 (b), 1980-82 (a).
NUTRIENT DATA: 1968 (b), 1969-81 (d), 1982 (c).
BIOLOGICAL DATA:
Bacteria--1973-81 (d), 1982 (c).
Phytoplankton--1975-77 (d), 1978-79 (c), 1980 (b), 1981 (c).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975-76 (d), 1977 (c), 1978-81 (d), 1982 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: October 1955 to September 1959, July 1962 to March 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
NOV 30...	1200	4320	90	7.4	1.0	1.8	760	13.8	97	190	130	44
FEB 17...	1315	2480	85	6.9	.0	2.6	760	14.7	101	110	44	35
MAR 18...	1045	5550	95	7.2	.5	3.4	740	14.8	106	150	650	44
MAY 12...	0800	4300	85	7.0	14.0	1.9	760	10.9	106	120	110	34
JUN 23...	0915	2280	77	7.1	18.5	2.1	755	9.3	100	200	76	35
AUG 04...	0745	1270	96	7.5	21.5	1.5	760	8.5	97	190	420	41

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 30...	12	15	1.6	2.8	.7	32	11	2.8	.1	7.2	67	61
FEB 17...	8.0	12	1.2	3.1	.9	27	12	2.8	.1	6.7	67	55
MAR 18...	9.0	15	1.5	2.9	1.3	35	11	3.8	<.1	6.3	67	63
MAY 12...	8.0	12	1.1	2.3	.7	27	8.0	2.2	.1	4.8	60	47
JUN 23...	7.0	12	1.1	2.4	.6	28	10	2.2	.1	5.7	58	51
AUG 04...	7.0	14	1.4	5.9	.5	34	12	2.5	.1	6.7	85	64

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
NOV 30...	.45	.030	<.10	.030	<.010	.020	1	<1	<100	16	<1	<1
FEB 17...	.56	.090	.34	.020	.010	.020	--	--	--	--	--	--
MAR 18...	.74	.150	.54	.050	.030	.020	1	<1	100	16	<1	<1
MAY 12...	.43	.100	.27	.020	<.010	<.010	--	--	--	--	--	--
JUN 23...	.39	.080	.20	.040	<.010	<.010	1	1	<100	17	<1	<1
AUG 04...	.35	.100	.40	.030	.020	.030	1	1	100	20	<1	2

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
NOV 30...	10	10	3	<1	8	2	330	150	9	1	20
FEB 17...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	10	<10	1	<1	94	3	350	160	6	3	30
MAY 12...	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	10	<10	1	<1	2	1	420	230	4	4	60
AUG 04...	10	<10	1	2	12	4	570	260	7	4	40

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 30...	22	<.1	.1	1	1	<1	<1	<1	<1	50	11
FEB 17...	--	--	--	--	--	--	--	--	--	--	--
MAR 18...	28	.2	.1	1	<1	<1	<1	<1	<1	30	15
MAY 12...	--	--	--	--	--	--	--	--	--	--	--
JUN 23...	15	<.1	<.1	1	1	<1	<1	<1	<1	60	<4
AUG 04...	13	.1	<.1	1	1	<1	<1	<1	<1	30	31

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 30...	1200	4320	2	23
FEB 17...	1315	2480	2	13
MAR 18...	1045	5550	5	75
JUN 23...	0915	2280	3	18
AUG 04...	0745	1270	2	6.9

04260500 BLACK RIVER AT WATERTOWN, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PCB, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
FEB										
17...	1315	<.10	<.10	<.01	<.10	<.01	<.01	<.01	.01	<.01
MAY										
12...	0800	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)	METHYL TRITHION, TOTAL (UG/L)
FEB										
17...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
MAY										
12...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
FEB									
17...	<.01	<.01	<.01	<1	<.01	<.01	<.01	<.01	<.01
MAY									
12...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	PCN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV									
30...	1200	32	<1.0	<.1	<1.0	<.1	<.1	.5	<.1

DATE	ENDOSULFAN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATERIAL (UG/KG)	PERTHANE IN BOTTOM MATERIL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)
NOV									
30...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.10	<1.0

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO LAKE ONTARIO

04253300 SIXTH LAKE.--Lat 43°44'43", long 74°46'58", Hamilton County, Hydrologic Unit 04150101, on dam at outlet of Sixth Lake at Inlet, and 11.2 mi (18.0 km) upstream from dam at Old Forge. DRAINAGE AREA, 18.6 mi^2 (48.2 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The Sixth and Seventh Lakes of Fulton Chain Lakes are partially formed and controlled by the concrete dam at Inlet, while the Eighth Lake is upstream and at approximately 5 ft (1.5 m) higher elevation. Storage began around 1881. The present structure is a concrete dam with control gates which were installed in 1938. Usable capacity 296.6 mil ft^3 (8.40 hm^3) between minimum operating level, elevation 1,755.1 ft (541.05 m) and crest of spillway, elevation 1,786.0 ft (544.37 m), no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 332 mil ft^3 (9.4 hm^3) Oct. 3, 1945, elevation, 1,787.1 ft (544.71 m); minimum observed, less than 900,000 ft^3 (25,500 m^3) Nov. 18, 1943, water level below elevation 1,775.6 ft (541.20 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 295.0 mil ft^3 (8.4 hm^3) June 3, 4, elevation, 1,785.95 ft (544.358 m); minimum observed, 123.2 mil ft^3 (3.49 hm^3) Mar. 24, elevation, 1,780.40 ft (542.666 m).

04253400 FIRST LAKE (formerly published as "Old Forge Reservoir").--Lat 43°42'44", long 74°58'12", Herkimer County, Hydrologic Unit 04150101, at dam on Middle Branch Moose River, and 100 ft (30 m) downstream from bridge on State Highway 28 at Old Forge, 11.2 mi (18.0 km) downstream from dam on Sixth Lake outlet at Inlet. DRAINAGE AREA, 52.1 mi^2 (135 km^2). PERIOD OF RECORD, November 1911 to current year. GAGE, nonrecording gage read daily at 0800. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Hudson River-Black River Regulating District).

The First through Fifth Lakes of Fulton Chain Lakes are partially formed and controlled by a concrete dam with 12-inch flashboards. Storage began around 1881 or 1882 with a wooden crib dam. This dam was replaced with a concrete dam in 1905 and gates were installed in 1927. Usable capacity with flashboards, 895.6 mil ft^3 (25.36 hm^3), elevation, 1,707.0 ft (520.29 m). Usable capacity without flashboards, 764.3 mil ft^3 (21.64 hm^3), elevation, 1,706.1 ft (520.02 m); no dead storage below minimum operating level. Figures given herein represent total contents. The dam is operated, records collected, furnished, and stored by Board of Hudson River-Black River Regulating District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 1,019 mil ft^3 (28.85 hm^3) June 17, 1972, elevation, 1,707.9 ft (520.57 m); minimum observed, 6,500,000 ft^3 (184,000 m^3) Nov.3, 1939, elevation, 1,699.8 ft (518.10 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 960.4 mil ft^3 (27.20 hm^3) Oct. 29, elevation, 1,707.36 ft (520.40 m); minimum observed, 195.6 mil ft^3 (5.54 hm^3) Mar. 24, elevation, 1,701.38 ft (518.58 m).

04256500 STILLWATER RESERVOIR NEAR BEAVER RIVER, NY (see station for daily elevation, skeleton capacity table, monthly contents, and change in contents).

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

	*Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)	*Elevation (feet)	Contents (million ft^3)	Change in contents (equivalent in ft^3/s)
	04253300 Sixth Lake			04253400 First Lake		
Sept. 30	1,785.13	268.8		1,706.83	887.2	
Oct. 31	1,784.57	251.0	- 6.65	1,707.02	912.8	+ 9.56
Nov. 30	1,783.35	213.0	-14.7	1,705.46	705.8	- 79.9
Dec. 31	1,782.90	199.1	- 5.19	1,703.32	431.6	-102.4
CAL YR 1981			- 1.10			- 1.95
Jan. 31	1,783.07	204.4	+ 1.98	1,702.97	388.1	- 16.2
Feb. 28	1,781.35	151.7	-21.8	1,702.33	309.9	- 32.3
Mar. 31	1,781.60	159.2	+ 2.80	1,702.04	274.8	- 13.1
Apr. 30	1,784.33	243.5	+32.5	1,705.30	685.0	+158.3
May 31	1,784.38	245.1	+ 0.60	1,706.60	856.0	+ 63.8
June 30	1,785.85	291.8	+18.0	1,706.91	898.3	+ 16.3
July 31	1,785.45	279.0	- 4.78	1,706.89	895.6	- 1.01
Aug. 31	1,785.27	273.2	- 2.16	1,706.92	899.6	+ 1.49
Sept. 30	1,783.87	229.2	-17.0	1,706.35	822.5	- 29.7
WTR YR 1982			- 1.26			- 2.05

* Elevation at 2400 hours, by interpolation.

04261000 OSWEGATCHIE RIVER AT CRANBERRY LAKE, NY

LOCATION.--Lat 44°13'15", long 74°51'00", St. Lawrence County, Hydrologic Unit 04150302, on right bank 900 ft (274 m) downstream from dam at outlet of Cranberry Lake, at village of Cranberry Lake.

DRAINAGE AREA.--140 mi² (363 km²).

PERIOD OF RECORD.--May 1923 to 1982 (discontinued). Prior to October 1958, published as "East Branch Oswegatchie River at Cranberry Lake."

REVISED RECORDS.--WRD NY-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,458.23 ft (444.468 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, nonrecording gage at site 80 ft (24 m) upstream at same datum.

REMARKS.--Records good. Since 1867, flow regulated by Cranberry Lake.

AVERAGE DISCHARGE.--59 years, 294 ft³/s (8.326 m³/s), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,940 ft³/s (54.9 m³/s) May 13, 1943, gage height, 7.70 ft (2.347 m); minimum daily, 3 ft³/s (0.085 m³/s) Apr. 9-16, 1931.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,000 ft³/s (28.3 m³/s) Apr. 23; minimum daily, 165 ft³/s (4.67 m³/s) June 27-29, Aug. 23-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660	882	393	258	378	349	418	370	191	166	168	166
2	655	868	346	258	377	348	440	259	193	166	168	166
3	651	853	346	258	375	346	498	259	193	166	168	170
4	648	834	346	257	375	345	512	259	207	168	168	172
5	496	822	346	258	375	343	559	256	241	168	170	172
6	436	812	343	258	375	343	607	256	327	166	170	172
7	471	803	343	259	375	342	611	256	392	168	170	193
8	585	794	343	261	374	342	607	256	392	168	170	236
9	585	759	343	261	373	340	607	256	388	168	170	236
10	585	700	343	260	373	339	602	256	388	168	170	234
11	584	697	340	260	371	336	598	254	388	168	170	234
12	582	693	339	260	371	335	593	254	373	168	168	234
13	581	690	339	259	371	335	589	252	327	168	168	221
14	578	686	339	258	369	336	589	254	327	168	168	191
15	576	684	338	258	367	301	589	254	304	168	168	191
16	575	618	336	258	364	228	537	254	256	168	168	193
17	573	487	312	258	363	228	444	252	243	168	168	191
18	572	486	261	258	362	228	705	252	195	168	166	191
19	573	462	261	258	361	228	862	252	195	168	166	191
20	526	409	261	258	360	228	919	234	195	168	166	189
21	432	410	261	258	358	228	959	191	193	168	166	189
22	432	412	261	257	357	229	989	191	193	168	166	189
23	432	412	259	256	357	228	1000	191	195	166	165	191
24	432	410	258	257	356	229	983	189	195	166	165	191
25	432	409	258	256	356	230	977	189	179	166	166	191
26	530	408	258	255	353	277	840	191	166	166	166	191
27	573	410	258	255	353	408	657	191	165	166	166	191
28	668	412	258	271	351	408	482	191	165	166	166	191
29	774	412	258	328	---	407	469	191	165	168	166	199
30	853	412	258	377	---	407	404	191	166	168	166	234
31	891	---	258	376	---	409	---	191	---	168	166	---
TOTAL	17941	18146	9463	8319	10250	9680	19646	7292	7497	5188	5192	5900
MEAN	579	605	305	268	366	312	655	235	250	167	167	197
MAX	891	882	393	377	378	409	1000	370	392	168	170	236
MIN	432	408	258	255	351	228	404	189	165	166	165	166

CAL YR 1981 TOTAL 139120 MEAN 381 MAX 891 MIN 147
WTR YR 1982 TOTAL 124514 MEAN 341 MAX 1000 MIN 165

04262500 WEST BRANCH OSWEGATCHIE RIVER NEAR HARRISVILLE, NY

LOCATION.--Lat 44°11'08", long 75°19'52", St. Lawrence County, Hydrologic Unit 04150302, on right bank just downstream from highway bridge, 0.5 mi (0.8 km) northeast of Geers Corners, 1.5 mi (2.4 km) downstream from Big Creek, and 4.0 mi (6.4 km) downstream from Harrisville.

DRAINAGE AREA.--244 mi^2 (632 km^2), revised.

PERIOD OF RECORD.--July 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area. WSP 784: 1934.

GAGE.--Water-stage recorder. Datum of gage is 738.51 ft (225.098 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 30, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except for winter periods, which are fair.

AVERAGE DISCHARGE.--66 years, 514 ft^3/s (14.56 m^3/s), 28.61 in/yr (727 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,080 ft^3/s (200 m^3/s) Mar. 15, 1977, gage height, 9.31 ft (2.838 m); maximum gage height, 9.6 ft (2.93 m) Jan. 9, 1930; minimum discharge, 25 ft^3/s (0.71 m^3/s) Sept. 1, 1934, gage height, 0.86 ft (0.262 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft^3/s (93 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	2400	4,380	124	7.16	2.182
Apr. 19	0700	*4,960	140	*7.65	2.332

Minimum discharge, 62.1 ft^3/s (1.76 m^3/s) July 28, gage height, 1.34 ft (0.408 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	666	1340	719	290	213	180	3200	639	334	688	271	281
2	583	1010	654	290	274	180	3940	548	646	473	224	251
3	576	828	627	290	371	180	2950	457	882	368	180	383
4	635	694	596	357	428	170	2470	423	796	315	157	432
5	680	604	544	653	478	170	2050	401	578	261	141	373
6	649	581	492	844	492	180	1720	378	743	217	124	325
7	675	766	397	914	460	190	1400	356	1510	189	114	283
8	1020	916	370	841	423	190	1200	342	1520	179	106	229
9	1580	904	360	695	391	190	955	516	1100	182	137	184
10	1530	834	350	600	372	196	857	831	713	166	159	160
11	1270	752	340	500	348	201	801	857	477	150	172	141
12	994	688	330	420	329	281	740	688	351	137	157	131
13	782	610	330	330	312	430	699	538	285	142	135	119
14	629	548	320	290	293	615	819	456	255	136	130	109
15	530	511	310	270	275	707	991	388	232	120	130	120
16	468	522	300	260	270	746	1160	346	224	114	127	364
17	424	554	280	240	260	733	1510	307	230	109	116	397
18	407	576	270	240	260	682	3140	281	230	105	105	303
19	474	633	270	230	250	675	4750	265	210	99	96	266
20	626	773	260	220	250	688	3760	284	190	93	96	240
21	655	929	255	210	240	700	2610	369	180	84	109	211
22	658	1100	267	210	230	759	2220	343	170	77	122	176
23	700	1100	302	200	220	834	1930	300	270	75	114	169
24	865	907	416	190	220	840	1500	297	400	69	131	366
25	944	734	476	190	210	922	1230	331	426	65	262	673
26	928	622	441	190	200	1210	1100	318	362	64	639	566
27	1140	668	380	190	200	1300	1060	285	356	64	751	513
28	2010	907	350	190	190	1600	993	254	325	69	595	804
29	2940	1000	320	200	---	1400	904	240	343	307	492	916
30	2560	868	310	200	---	1260	767	240	664	474	446	802
31	1870	---	300	200	---	1300	---	268	---	354	360	---
TOTAL	30468	23479	11936	10944	8459	19709	53426	12546	15002	5945	6898	10287
MEAN	983	783	385	353	302	636	1781	405	500	192	223	343
MAX	2940	1340	719	914	492	1600	4750	857	1520	688	751	916
MIN	407	511	255	190	190	170	699	240	170	64	96	109
CFSM	4.03	3.21	1.58	1.45	1.24	2.61	7.30	1.66	2.05	.79	.91	1.41
IN.	4.65	3.58	1.82	1.67	1.29	3.00	8.15	1.91	2.29	.91	1.05	1.57

CAL YR 1981	TOTAL 241871	MEAN 663	MAX 3900	MIN 160	CFSM 2.72	IN 36.88
WTR YR 1982	TOTAL 209099	MEAN 573	MAX 4750	MIN 64	CFSM 2.35	IN 31.88

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°35'58", long 75°22'45", St. Lawrence County, Hydrologic Unit 04150302, on right bank 1.5 mi (2.4 km) downstream from Beaver Creek, and 2.5 mi (4.0 km) upstream from Heuvelton. Water-quality sampling site at discharge station except for the collection of once daily specific conductance and water temperature data which is collected at powerhouse 2.6 mi (4.2 km) downstream lat 44°37'02", long 75°24'18".

DRAINAGE AREA.--965 mi^2 (2,499 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1916 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 288.85 ft (88.041 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1916, nonrecording gage at same site and datum.

REMARKS.--Records excellent except those for winter periods, which are fair. Since 1867, seasonal flow regulated by Cranberry Lake; slight diurnal fluctuation at low flow and medium flow caused by powerplants. During high stages on Grass River, part of flow of that stream may pass through Upper Lake, Indian Creek and Lower Lake and enter Oswegatchie River at Rensselaer Falls, 4.5 mi (7.2 km) above station. In October 1973, a dike was installed on Indian Creek to prevent overflow of Grass River during high flows.

AVERAGE DISCHARGE.--66 years, 1,724 ft^3/s (48.82 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,600 ft^3/s (555 m^3/s) Apr. 6, 1960, gage height, 10.36 ft (3.158 m); minimum recorded, 130 ft^3/s (3.68 m^3/s) Aug. 17, 1949, gage height, 0.47 ft (0.143 m).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,580 ft^3/s (271 m^3/s) Apr. 3, gage height, 6.88 ft (2.097 m); minimum, 276 ft^3/s (7.82 m^3/s) July 28, gage height, 0.85 ft (0.259 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3290	6540	2760	1300	1000	800	7300	2190	899	1150	964	849
2	2900	5320	2340	1300	1100	780	8620	1910	1220	1470	704	790
3	2620	4170	2250	1400	1200	780	9340	1490	1710	1460	542	689
4	2390	3530	2280	1460	1230	800	9430	1120	2200	1320	462	777
5	2110	3170	2240	2980	1550	800	8750	1130	2080	957	501	926
6	2280	2850	1950	3910	1630	820	7600	1200	1840	876	623	866
7	2260	3180	1600	3740	1610	860	6120	1210	2790	668	480	727
8	2420	3580	1500	3340	1450	880	4740	1200	3910	620	490	585
9	3170	3860	1400	2810	1230	891	4060	1260	3820	566	506	706
10	3760	3800	1300	2410	1200	1030	3510	1520	2990	540	477	956
11	3770	3560	1300	1800	1200	1270	3150	2120	2210	603	399	709
12	3420	3080	1200	1630	1200	1440	2880	2150	1730	532	545	597
13	3010	2800	1200	1380	1200	2050	2750	1880	1420	491	500	499
14	2410	2450	1200	1220	1200	4060	2680	1630	1340	434	403	445
15	1990	2110	1100	1100	1200	5020	2930	1350	1130	602	495	399
16	1790	1980	1100	1000	1200	5160	3100	1370	1160	659	489	474
17	1660	2130	1000	940	1100	4740	3330	1160	1130	539	405	771
18	1560	2270	1000	920	1100	4250	4030	988	1030	541	330	1210
19	1690	2410	960	880	1100	3950	5310	991	977	488	396	922
20	1930	2590	920	880	1100	4060	6660	1060	976	347	443	756
21	2070	3000	900	880	1000	4190	7220	1050	737	301	469	701
22	2240	3750	894	880	1000	4280	6960	1270	657	373	484	590
23	2340	3920	1050	860	960	4550	6310	1260	933	337	439	665
24	2480	3500	1270	860	940	4870	5450	1030	1020	410	452	759
25	2750	3010	1470	860	920	5370	4660	939	1440	445	434	916
26	2960	2570	1650	840	900	6050	3960	1030	1520	322	858	1470
27	3990	2530	1570	840	840	6440	3540	1020	1320	300	1390	1390
28	5980	2860	1410	880	820	6370	3290	1040	1080	283	1630	1330
29	7360	3090	1300	880	---	5930	2880	878	872	323	1450	1950
30	7680	3120	1200	900	---	5440	2630	688	955	470	1150	2210
31	7430	---	1200	900	---	5730	---	742	---	754	868	---
TOTAL	97710	96730	44514	45980	32180	103661	153190	39876	47096	19181	19778	26634
MEAN	3152	3224	1436	1483	1149	3344	5106	1286	1570	619	638	888
MAX	7680	6540	2760	3910	1630	6440	9430	2190	3910	1470	1630	2210
MIN	1560	1980	894	840	820	780	2630	688	657	283	330	399

CAL YR 1981 TOTAL 805446 MEAN 2207 MAX 9150 MIN 580
WTR YR 1982 TOTAL 726530 MEAN 1990 MAX 9430 MIN 283

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960, 1966-69, 1971-72, 1978 to current year.
CHEMICAL DATA: 1960 (a), 1966 (b), 1968-69 (d), 1971-72 (a), 1978 (c), 1979-80 (d), 1981-82 (c).
MINOR ELEMENTS DATA: 1978-79 (b), 1980 (c), 1981-82 (b).
ORGANIC DATA: OC--1978 (c), 1979-80 (d), 1981 (c).
NUTRIENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c).
BIOLOGICAL DATA:
Bacteria--1978 (c), 1979-80 (d), 1981-82 (c)
Phytoplankton--1978-80 (c), 1981 (b).
Periphyton--1978-80 (b).
SEDIMENT DATA: 1978 (c), 1979-80 (d), 1981-82 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1978 to September 1981.
WATER TEMPERATURES: January 1978 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 155 micromhos Jan. 31, 1981; minimum daily, 22 micromhos sometime in February 1980.
WATER TEMPERATURES: Maximum daily, 28.0°C July 28, 1978 and July 23-28, 1979; minimum daily, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 12...	1200	3080	93	6.7	3.0	2.2	770	13.0	95	320	68	45
JAN 28...	1030	865	120	6.7	.0	--	750	12.8	89	240	110	--
FEB 17...	1000	1180	97	6.2	.0	2.5	770	13.7	93	--	--	42
MAR 24...	1100	4800	118	6.6	.0	5.0	755	13.0	90	300	K1500	56
MAY 03...	1030	1510	54	6.5	12.5	.90	760	10.0	94	K27	K20	31
JUN 04...	1100	2190	110	6.7	19.5	1.7	765	7.9	86	120	66	49
AUG 26...	1315	956	102	6.9	19.0	2.0	755	8.7	95	73	440	43

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 12...	14	12	3.7	2.4	.7	31	11	2.3	.1	6.0	66	57
JAN 28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 17...	11	12	2.9	2.4	.8	31	14	3.4	.1	7.1	72	61
MAR 24...	7.0	15	4.5	2.4	1.4	49	11	3.6	.1	5.9	81	74
MAY 03...	9.0	9.0	2.0	1.7	.7	22	11	1.9	.1	4.5	50	44
JUN 04...	14	14	3.3	2.5	.7	35	15	2.7	.1	4.5	86	64
AUG 26...	12	12	3.1	3.9	.4	31	16	3.8	.2	3.1	77	62

K Results based on colony count outside the acceptable range (non-ideal colony count).

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04263000 OSWEGATCHIE RIVER NEAR HEUVELTON, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 12...	.17	.030	.43	.030	.020	<.010	1	<1	100	18	<1	1
JAN 28...	.32	.130	.35	.050	.100	.020	--	--	--	--	--	--
FEB 17...	.36	.130	2.70	.020	.010	.010	--	--	--	--	--	--
MAR 24...	.31	.200	.75	.090	.050	.030	1	<1	100	23	<1	<1
MAY 03...	.39	.050	<.10	.020	.010	<.010	--	--	--	--	--	--
JUN 04...	.29	.040	<.10	.020	<.010	<.010	1	<1	<100	30	<1	<1
AUG 26...	.14	.040	3.90	.020	.020	<.010	1	1	100	100	1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 12...	10	<10	<1	<1	7	1	390	190	13	3	30
JAN 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 17...	--	--	--	--	--	--	--	--	--	--	--
MAR 24...	20	10	1	<1	6	3	550	180	6	<1	50
MAY 03...	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	20	10	<1	1	5	2	490	230	4	3	40
AUG 26...	10	10	1	<1	5	2	340	220	4	3	20

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 12...	16	.1	.1	<1	<1	<1	<1	<1	<1	50	17
JAN 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 17...	--	--	--	--	--	--	--	--	--	--	--
MAR 24...	34	<.1	<.1	1	1	<1	<1	<1	<1	20	12
MAY 03...	--	--	--	--	--	--	--	--	--	--	--
JUN 04...	18	.2	.1	<1	3	<1	<1	<1	<1	20	16
AUG 26...	20	<.1	<.1	1	1	<1	<1	<1	<1	20	10

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 12...	1200	3080	3	25
JAN 28...	1030	865	1	2.3
MAR 24...	1100	4800	9	117

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
JUN 04...	1100	2190	3	18
AUG 26...	1315	956	3	7.7

04264050 ST. LAWRENCE RIVER NEAR WADDINGTON, NY

LOCATION.--Lat 44°51'27", long 75°14'46", St. Lawrence County, Hydrologic Unit 04150301, on right bank at Leishman Point, 2.1 mi (3.4 km) west of Waddington, 2.5 mi (4.0 km) upstream from Sucker Brook, and 3.3 mi (5.3 km) downstream from Iroquois Dam.

DRAINAGE AREA.--298,500 mi² (773,100 km²).

PERIOD OF RECORD.--January 1976 to November 1976, November 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is International Great Lakes Datum.

REMARKS.--Flow regulated by international agreement administered by International St. Lawrence River Board of control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Chicago Sanitary and Ship Canal, operation of which began in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, operation of which began in July 1939, and by the Ogoki Project, operation of which began in July 1943.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 244.80 ft (74.615 m) Apr. 6, 1976, minimum daily, 236.30 ft (72.024 m) Feb. 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum elevation recorded, 243.16 ft (74.115 m) Apr. 4, minimum recorded, 236.88 ft (72.201 m) Feb. 18.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239.90	---	239.69	238.39	238.02	237.76	241.74	241.47	241.79	241.69	---	240.46
2	239.82	---	239.82	238.44	237.83	237.95	242.11	241.34	242.03	241.92	---	240.66
3	239.95	---	239.91	237.82	237.80	237.90	241.94	241.26	241.84	241.72	---	241.06
4	240.08	---	239.80	237.68	237.99	237.79	242.77	241.25	241.62	241.47	---	241.21
5	240.07	---	239.65	239.10	237.98	237.95	242.16	241.33	241.38	241.46	---	241.08
6	239.95	---	239.49	239.69	238.11	237.93	240.93	241.29	241.07	241.45	---	240.92
7	240.61	---	239.52	240.94	238.15	237.92	240.74	241.29	241.36	241.50	---	240.43
8	240.29	---	239.34	241.25	237.95	238.06	240.83	241.36	241.71	241.55	---	240.38
9	240.00	---	239.32	241.33	237.36	237.90	240.99	241.49	241.84	241.60	---	240.60
10	239.84	---	239.34	241.42	237.37	237.93	241.10	241.38	241.78	241.53	---	240.74
11	239.74	239.92	239.39	242.19	237.37	237.91	241.06	241.35	241.91	241.39	---	240.56
12	239.51	239.77	239.28	241.22	237.34	237.96	241.00	241.29	241.80	241.74	---	240.36
13	239.52	239.84	239.38	240.39	237.14	237.99	241.05	241.27	241.68	241.77	---	240.35
14	239.58	239.77	239.43	239.76	237.09	238.23	241.32	241.18	241.71	241.51	---	240.41
15	239.78	239.50	239.33	239.68	237.05	238.27	241.03	241.31	241.69	241.37	---	240.11
16	239.85	239.33	239.29	239.92	237.14	238.20	240.96	241.50	241.80	241.37	---	240.14
17	---	239.52	239.34	240.02	237.00	238.07	240.90	241.43	241.72	241.35	---	240.21
18	---	239.71	239.07	239.84	236.90	238.33	241.35	241.36	241.70	241.52	---	240.36
19	---	239.85	239.04	239.45	237.09	238.72	241.86	241.42	241.54	241.58	241.07	240.40
20	---	239.54	239.18	239.14	237.28	239.00	242.05	241.64	241.80	241.25	241.22	240.21
21	---	239.76	239.17	238.83	237.24	239.21	242.59	241.45	241.78	241.13	240.85	240.24
22	---	240.12	239.20	238.77	237.32	239.61	242.72	241.30	241.69	241.19	240.93	240.03
23	---	240.07	238.70	238.68	237.47	239.86	242.77	241.25	241.70	241.13	241.14	239.99
24	---	239.81	239.01	239.16	237.44	240.08	242.68	241.35	241.74	241.10	241.04	240.27
25	---	239.70	239.25	239.07	237.57	240.41	241.78	241.47	241.84	241.30	240.86	240.25
26	---	239.55	238.76	239.03	237.75	240.79	241.25	241.61	241.73	241.34	241.11	240.27
27	---	239.88	238.17	238.97	237.87	240.98	240.89	241.56	241.61	241.14	241.32	240.08
28	---	240.49	238.19	238.70	237.83	240.90	240.65	241.46	241.59	241.03	241.12	240.29
29	---	240.13	238.20	238.82	---	240.93	241.02	241.50	241.56	241.14	241.05	240.22
30	---	239.87	238.25	238.60	---	240.73	241.42	241.49	241.62	241.12	241.01	240.31
31	---	---	238.18	238.44	---	240.98	---	241.61	---	241.19	240.84	---
MEAN	---	---	239.15	239.51	237.52	238.91	241.52	241.40	241.69	241.40	---	240.42
MAX	---	---	239.91	242.19	238.15	240.98	242.77	241.64	242.03	241.92	---	241.21
MIN	---	---	238.17	237.68	236.90	237.76	240.65	241.18	241.07	241.03	---	239.99

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY
(National stream-quality accounting network station)
(National radiochemical network station)

LOCATION.--Lat 45°00'22", long 74°47'43", Stormont County, Ontario--St. Lawrence County, N.Y., Hydrologic Unit 04150301, at Robert Moses-Robert H. Saunders power dam on Lake St. Lawrence at the International Boundary at Cornwall, Ontario, 2.9 mi (4.7 km) upstream from Grass River, 6.2 mi (10.0 km) upstream from Raquette River, and 5.9 mi (9.5 km) northeast of Massena, N.Y.. Water-quality samples collected at power dam from taps at generators 17 and 30.

DRAINAGE AREA.--298,800 mi^2 (773,890 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1860 to current year. Monthly discharges only for some periods, published in WSP 1307. Prior to October 1971 published as 04264000 "St. Lawrence River at Ogdensburg."

REVISED RECORDS.--WSP 1437: 1870, 1874, 1881, 1883, 1890.

GAGE.--There is no gage. Discharge is determined from summation of discharge through the Robert Moses-Robert H. Saunders power dam, the Long Sault Dam, the Massena Diversion, the Rasin River Diversion, the Cornwall and Massena municipal water supply, and the Cornwall and the Wiley-Dondero navigation canals. U.S.-Canada coordinated discharge figures supplied by Corps of Engineers. Prior to 1956, base gage at lock 25 at Iroquois Ont. with supplementary gages. August 1956 to June 1958, base gage at lock 24 between Iroquois and Morrisburg, Ont., and supplementary gages. Prior to Aug. 1956, these were gages of the Canadian Hydrographic Service and from August 1956 to June 1958, were gages of the Hydro-Electric Power Commission of Ontario. Discharge in the reach of river at Cornwall, Ont.--near Massena, N.Y. is considered to be the same as discharge at Ogdensburg, N.Y. when adjusted for storage in Lake St. Lawrence.

REMARKS.--Since July 1958, flow regulated by international agreement administered by International St. Lawrence River Board of Control under the International Joint Commission. Records do not include water diverted from Lake Michigan by Illinois and Michigan Canal during period of its operation prior to 1910 and by Chicago Sanitary and Ship Canal, which began operation in 1900. Records include water diverted into Lake Superior from Hudson Bay drainage by the Long Lake Project, which began operation in July 1939, and by the Ogoki project, which began operation in July 1943.

COOPERATION.--Records of daily discharge furnished by Buffalo District, Corps of Engineers through International St. Lawrence River Board of Control.

AVERAGE DISCHARGE.--122 years (1860-1982), 243,100 ft^3/s (6,885 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 352,000 ft^3/s (9,969 m^3/s) June 22, 1976; minimum daily, 139,000 ft^3/s (3,940 m^3/s) Feb. 7, 1936. Maximum monthly discharge, 350,000 ft^3/s (9,910 m^3/s) July 1973; minimum monthly, 154,000 ft^3/s (4,360 m^3/s) Feb. 1936.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 310,000 ft^3/s (8,779 m^3/s) Dec. 26-Jan. 4, minimum daily, 210,000 ft^3/s (5,947 m^3/s) Jan. 12-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302000	300000	297000	310000	240000	255000	252000	293000	278000	294000	282000	277000
2	302000	297000	297000	310000	240000	255000	240000	293000	280000	294000	282000	277000
3	301000	300000	297000	310000	240000	255000	245000	293000	281000	298000	282000	277000
4	301000	294000	297000	310000	240000	255000	256000	293000	281000	298000	282000	273000
5	301000	297000	296000	303000	240000	255000	269000	293000	288000	298000	282000	273000
6	301000	298000	296000	253000	245000	251000	277000	293000	288000	298000	282000	273000
7	301000	297000	296000	230000	245000	251000	277000	293000	283000	298000	281000	273000
8	301000	297000	296000	230000	247000	251000	277000	292000	282000	298000	281000	273000
9	301000	297000	296000	230000	250000	251000	277000	292000	284000	298000	281000	273000
10	300000	297000	296000	230000	251000	251000	284000	292000	285000	292000	281000	273000
11	300000	297000	296000	225000	250000	251000	284000	292000	285000	292000	281000	276000
12	300000	297000	295000	210000	250000	251000	284000	292000	292000	292000	281000	276000
13	300000	297000	294000	210000	255000	251000	284000	292000	292000	292000	281000	272000
14	301000	297000	294000	210000	255000	251000	284000	292000	292000	292000	276000	271000
15	299000	297000	294000	210000	255000	251000	284000	286000	292000	292000	276000	272000
16	300000	297000	294000	210000	255000	251000	284000	286000	292000	292000	276000	271000
17	298000	297000	294000	210000	255000	252000	296000	286000	292000	289000	276000	275000
18	298000	297000	294000	215000	255000	252000	295000	286000	292000	289000	276000	272000
19	298000	297000	294000	223000	255000	252000	247000	286000	295000	289000	276000	272000
20	298000	297000	294000	230000	255000	256000	247000	286000	295000	289000	276000	272000
21	298000	297000	305000	230000	255000	256000	247000	286000	295000	289000	273000	272000
22	298000	297000	305000	230000	255000	256000	248000	283000	295000	289000	273000	272000
23	298000	297000	305000	230000	255000	256000	248000	283000	295000	289000	273000	272000
24	297000	297000	305000	230000	255000	255000	262000	283000	295000	285000	273000	272000
25	297000	297000	305000	230000	255000	256000	292000	283000	295000	285000	273000	267000
26	297000	297000	310000	230000	255000	256000	299000	283000	294000	285000	273000	267000
27	297000	297000	310000	232000	255000	262000	305000	283000	294000	285000	273000	267000
28	297000	297000	310000	240000	255000	262000	298000	283000	294000	285000	277000	267000
29	297000	297000	310000	240000	---	262000	285000	284000	294000	285000	277000	267000
30	297000	297000	310000	240000	---	262000	281000	284000	294000	285000	277000	267000
31	301000	---	310000	240000	---	262000	---	279000	---	282000	277000	---
TOTAL	9277000	8914000	9292000	7441000	7018000	7893000	8208000	8925000	8694000	9018000	8610000	8161000
MEAN	299300	297100	299700	240000	250600	254600	273600	287900	289800	290900	277700	272000
MAX	302000	300000	310000	310000	255000	262000	305000	293000	295000	298000	282000	277000
MIN	297000	294000	294000	210000	240000	251000	240000	279000	278000	282000	273000	267000

CAL YR 1981 TOTAL 98465000 MEAN 269800 MAX 310000 MIN 210000
WTR YR 1982 TOTAL 101451000 MEAN 277900 MAX 310000 MIN 210000

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1966 to current year. Prior to October 1970, published as "near Massena, NY."
CHEMICAL DATA: 1955 (a), 1974 (c), 1975-81 (d), 1982 (c).
MINOR ELEMENTS DATA: 1974-77 (b), 1978 (a), 1979 (b), 1980 (c), 1981-82 (b).
RADIOCHEMICAL DATA: 1974-82 (a).
ORGANIC DATA: OC--1974 (a), 1975 (b), 1977 (b), 1978-81 (d).
NUTRIENT DATA: 1974-75 (c), 1976-81 (d), 1982 (c).
BIOLOGICAL DATA:
Bacteria--1974 (c), 1975-81 (d), 1982 (c).
Phytoplankton--1974 (a), 1975-77 (d), 1978-81 (c).
Periphyton--1974 (a), 1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d), 1982 (c).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURES: October 1955 to October 1958, unpublished; January 1966 to current year.

REMARKS.--Temperature observations made approximately 68 ft (21 m) below normal forebay level. Temperature observations from October 1955 to October 1958 made at Aluminum Company of America Massena Canal power station.

COOPERATION.--Water-temperature record furnished by the Power Authority of the State of New York.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Aug. 7, 1978, Mar. 29, 1979; minimum daily, 250 micromhos Dec. 21, 1978.
WATER TEMPERATURES: Maximum daily, 24.5°C on several days in August and September 1973 and August 1975; minimum daily, freezing point on many days during winter periods except 1972-74, 1979, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 340 micromhos Nov. 5, May 6-11, 13, 14, and June 20; minimum daily, 280 micromhos Oct. 4, 5, Feb. 25, Sept. 29, 30.
WATER TEMPERATURES: Maximum daily, 22.0°C July 23-25, 27-28; minimum daily, 0.5°C on several days during January to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (FTU)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 27...	1000	297000	322	7.3	10.0	.40	760	10.6	94	K4	26	130
DEC 28...	1000	310000	325	7.5	2.0	--	760	14.4	104	K4	42	--
FEB 24...	1000	255000	317	8.1	.5	1.7	770	14.5	99	K4	K1	130
MAR 25...	0945	256000	325	8.3	1.0	1.1	760	13.7	96	K1	42	130
APR 27...	0945	305000	296	8.0	5.0	1.0	760	14.7	116	K2	46	130
JUN 25...	0945	295000	310	8.2	15.0	2.5	760	10.3	102	K2	94	130
AUG 26...	0915	273000	306	7.8	19.5	2.1	760	9.2	100	45	42	110

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 27...	38	39	7.8	12	1.4	92	27	24	.2	.3	173	167
DEC 28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	36	39	8.1	14	1.6	95	31	28	.2	.4	204	180
MAR 25...	31	37	8.1	12	1.4	95	26	25	.1	.6	181	167
APR 27...	36	39	8.0	12	1.3	94	27	24	.1	.1	202	168
JUN 25...	33	38	7.7	14	1.3	94	24	24	.1	.1	194	166
AUG 26...	23	33	6.3	12	1.1	85	25	24	.2	.2	177	153

K Results based on colony count outside tne acceptable range (non-ideal colony count).

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
OCT 27...	.17	.020	.28	.010	.010	<.010	1	1	100	20	1	1
DEC 28...	.22	.010	.41	.020	.010	<.010	--	--	--	--	--	--
FEB 24...	.43	.020	1.10	.050	<.010	<.010	1	1	100	27	<1	<1
MAR 25...	--	--	--	--	--	--	--	--	--	--	--	--
APR 27...	.23	.040	.90	.020	<.010	<.010	--	--	--	--	--	--
JUN 25...	.19	.090	.30	.020	<.010	<.010	1	1	<100	29	<1	<1
AUG 26...	<.10	.040	.60	.040	.020	<.010	1	1	100	100	1	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 27...	20	10	<1	<1	13	2	160	9	2	<1	<10
DEC 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	30	10	4	2	7	2	620	<3	<1	<1	20
MAR 25...	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 25...	20	10	<1	<1	25	3	460	<3	<1	<1	40
AUG 26...	10	10	4	3	9	3	200	<10	6	4	<10

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 27...	1	<.1	<.1	3	<1	<1	<1	<1	<1	100	9
DEC 28...	--	--	--	--	--	--	--	--	--	--	--
FEB 24...	2	.1	<.1	3	2	<1	<1	<1	<1	90	38
MAR 25...	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--
JUN 25...	23	<.1	.2	<1	<1	<1	<1	<1	<1	50	14
AUG 26...	<10	<.1	<.1	2	<1	<1	<1	<1	<1	30	20

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
OCT 27...	1001	3.6	<.4	.04	.38	<5.7	<.4	3.5	<.4
AUG 26...	0915	3.2	<.4	.04	.40	<4.7	<.4	3.0	<.4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 27...	1000	297000	2	1600
DEC 28...	1000	310000	1	837
FEB 24...	1000	255000	5	3440
MAR 25...	0945	256000	2	1380
JUN 25...	0945	295000	8	6370
AUG 26...	0915	273000	4	2950

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	300	310	310	320	310	300	330	310	310	300	290
2	290	300	320	310	320	310	---	330	310	310	300	290
3	290	300	320	310	320	310	310	330	---	310	300	290
4	280	300	300	310	---	300	300	330	310	310	300	290
5	280	340	310	310	320	320	---	330	---	310	300	290
6	290	300	310	310	310	320	300	340	---	320	300	290
7	290	330	320	---	---	320	300	340	320	320	300	290
8	290	320	310	310	310	320	300	340	330	320	300	290
9	290	300	300	310	310	320	---	340	310	310	300	290
10	290	300	320	310	310	320	300	340	300	---	300	290
11	290	320	330	310	310	310	300	340	300	310	300	290
12	---	330	310	310	310	320	310	330	300	310	310	290
13	300	320	310	310	300	320	320	340	310	310	300	290
14	290	310	320	310	300	310	320	340	310	320	300	290
15	290	300	320	310	300	310	320	330	300	310	300	290
16	300	330	310	310	320	310	320	330	300	310	300	290
17	290	310	310	310	320	310	320	330	310	310	300	290
18	---	320	310	310	310	310	320	---	300	310	290	290
19	310	310	310	320	310	300	320	---	300	310	320	300
20	290	310	310	320	310	300	---	330	340	310	320	---
21	290	310	310	310	320	300	320	330	300	310	290	300
22	290	310	310	320	320	---	320	330	300	310	---	300
23	290	---	310	320	310	---	320	330	---	310	320	300
24	300	320	310	320	320	---	320	330	300	310	290	300
25	300	320	310	320	280	320	310	320	320	310	290	300
26	300	300	320	320	290	---	---	---	---	---	290	300
27	320	310	310	320	310	---	320	---	300	320	310	320
28	310	300	325	320	300	---	310	310	320	300	---	300
29	300	---	310	310	---	---	320	---	330	300	---	280
30	300	310	310	310	---	300	330	---	310	300	290	280
31	310	---	310	310	---	---	---	---	---	300	290	---
MEAN	295	312	313	313	310	312	313	332	310	310	300	293

04264331 ST. LAWRENCE RIVER AT CORNWALL, ONTARIO--NEAR MASSENA, NY--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13.5	10.0	6.0	2.0	.5	.5	1.0	6.0	12.5	16.0	21.0	19.0
2	13.0	10.0	6.0	2.0	.5	.5	1.0	6.0	13.0	16.0	21.0	19.0
3	13.0	10.0	6.0	1.5	.5	.5	1.0	6.5	---	16.0	21.0	19.0
4	13.5	10.0	6.0	1.5	.5	---	1.0	6.5	13.0	16.0	21.0	19.0
5	14.0	10.0	6.0	1.5	.5	.5	1.0	7.0	---	16.5	21.0	19.0
6	13.5	10.0	5.5	1.5	.5	1.0	1.0	7.0	---	17.0	21.0	19.0
7	13.5	10.0	5.0	1.0	---	1.0	1.0	7.0	13.0	17.0	21.0	18.5
8	13.0	10.0	5.0	1.0	.5	1.0	.5	7.5	13.5	17.0	21.5	18.5
9	13.0	9.0	5.0	.5	.5	1.0	.5	8.0	14.0	17.0	21.5	18.0
10	12.5	9.0	4.5	.5	.5	.5	.5	8.0	14.0	---	21.0	18.0
11	12.5	9.0	4.5	.5	.5	.5	1.0	8.0	14.0	17.5	21.0	18.5
12	---	8.5	4.5	.5	.5	.5	1.0	9.0	14.0	18.0	21.0	19.0
13	12.0	8.5	4.0	.5	.5	1.0	1.5	9.0	14.0	18.5	21.0	19.0
14	12.0	8.5	4.0	.5	1.0	1.0	2.0	9.0	14.0	18.5	21.0	19.0
15	12.0	8.0	4.0	.5	.5	1.0	2.0	9.5	13.5	19.0	21.0	19.0
16	12.0	8.0	4.0	.5	.5	1.0	2.5	10.0	14.0	19.5	21.0	19.0
17	12.0	8.0	4.0	.5	.5	1.0	3.0	10.0	14.0	20.0	21.0	18.5
18	---	8.0	4.0	.5	.5	1.0	3.5	---	14.5	20.0	21.0	18.0
19	12.0	8.0	3.5	.5	.5	1.0	3.5	---	15.0	21.0	21.0	18.0
20	12.0	8.0	3.0	.5	.5	1.0	3.5	10.0	15.0	21.0	21.0	18.0
21	11.5	8.0	3.0	.5	.5	1.0	4.0	10.5	15.0	21.0	21.0	18.0
22	11.0	7.5	3.0	.5	.5	---	4.0	10.5	15.0	21.5	20.5	18.0
23	11.0	7.5	3.0	.5	.5	---	4.5	10.0	---	22.0	20.5	18.0
24	11.0	7.0	3.0	.5	.5	---	4.5	10.5	15.5	22.0	20.5	18.0
25	10.5	7.0	2.5	.5	.5	1.0	5.0	10.5	15.5	22.0	20.5	18.0
26	10.0	7.0	2.5	.5	.5	---	5.0	---	---	---	20.0	17.0
27	10.0	6.5	2.5	.5	.5	---	5.0	---	15.5	22.0	20.0	17.0
28	10.0	6.5	2.0	.5	---	---	5.0	12.0	16.0	22.0	---	17.0
29	10.0	6.0	2.0	.5	---	---	5.5	---	---	21.0	---	17.0
30	10.0	6.0	2.0	.5	---	1.0	6.0	12.0	16.0	21.0	19.5	17.0
31	10.0	---	2.0	.5	---	---	---	---	---	21.0	19.5	---
MEAN	12.0	8.5	4.0	1.0	.5	1.0	2.5	9.0	14.5	19.0	21.0	18.5

04266500 RAQUETTE RIVER AT PIERCEFIELD, NY

LOCATION.--Lat 44°14'05", long 74°34'20", St. Lawrence County, Hydrologic Unit 04150305, on left bank 0.5 mi (0.8 km) downstream from powerplant at Piercefield, and 1.5 mi (2.4 km) upstream from Dead Creek.

DRAINAGE AREA.--721 mi^2 (1,867 km^2), revised.

PERIOD OF RECORD.--August 1908 to current year.

REVISED RECORDS.--WSP 604: 1924. WSP 759: Drainage area. WSP 1387: 1910, 1913, 1914(M), 1916, 1921.

GAGE.--Water-stage recorder. Datum of gage is 1,502.12 ft (457.846 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1912, nonrecording gage at same site (datum of gage lowered 2 ft or 0.6 m Jan. 1, 1911, to present datum).

REMARKS.--Records good except those for winter periods, which are fair. Seasonal distribution of flow modified by natural storage in lakes and ponds upstream from station and by regulation of Forked Lake, Round Lake, Lows Lake, and Raquette Pond (Tupper Lake) at Setting Pole Dam. Extensive diurnal fluctuation caused by powerplant at Piercefield.

AVERAGE DISCHARGE.--74 years, 1,295 ft^3/s (36.67 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,360 ft^3/s (237 m^3/s) May 8, 1972, gage height, 12.25 ft (3.734 m); minimum daily, 4.1 ft^3/s (0.12 m^3/s) Oct. 12, 1947.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,350 ft^3/s (180 m^3/s) Apr. 24, gage height, 10.89 ft (3.319 m); minimum daily, 174 ft^3/s (4.93 m^3/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2740	3440	1570	792	623	535	1610	5470	645	1210	453	663
2	2630	3450	1460	736	675	538	1970	5220	830	1140	440	784
3	2510	3420	1350	656	709	535	2070	4930	1310	1180	509	772
4	2420	3360	1240	627	663	532	2220	4660	1490	1130	613	667
5	2340	3290	1260	813	697	532	2340	4400	1700	1060	609	784
6	2250	3210	1060	886	752	532	2430	4130	1900	967	606	667
7	2220	3110	821	1150	744	538	2410	3870	2400	851	503	405
8	2170	3050	1250	1380	834	582	2430	3610	2730	776	506	364
9	2180	2890	1220	1170	899	532	2430	3440	2600	744	609	427
10	2190	2860	1120	1090	904	592	2400	3290	2450	801	649	414
11	2170	2710	1150	986	813	582	2340	3180	2330	671	663	453
12	2130	2590	1150	834	813	682	2270	3040	2190	571	660	361
13	2080	2490	991	656	760	682	2220	2880	2090	595	660	497
14	2040	2360	1040	443	756	686	2170	2730	1960	483	532	784
15	1880	2260	977	506	756	817	2150	2590	1810	473	453	519
16	1900	2160	864	555	760	977	2200	2470	1650	529	430	381
17	1780	2090	834	805	709	1010	2580	2320	1450	509	503	273
18	1720	2020	847	935	716	944	3690	2180	1410	469	516	174
19	1720	1930	813	877	417	847	4470	2060	1140	347	393	364
20	1750	1870	882	813	358	805	5040	1930	1130	320	486	459
21	1760	1850	768	809	532	776	5530	1760	1170	320	497	500
22	1760	1860	855	697	599	788	5970	1610	1100	278	453	367
23	1780	1850	864	613	522	1010	6250	1380	1310	350	417	473
24	1790	1830	826	649	490	1050	6290	1590	1310	254	678	535
25	1800	1790	868	620	497	1010	6300	1400	1360	353	705	634
26	1810	1720	805	623	522	1170	6230	1270	1240	230	381	535
27	1970	1650	834	623	532	1270	6110	1150	1360	176	663	641
28	2470	1610	864	623	532	1270	5980	1080	1330	254	667	656
29	2900	1590	838	641	---	1140	5880	1030	1170	263	796	788
30	3170	1590	796	652	---	1220	5690	963	1290	436	788	805
31	3360	---	826	649	---	1330	---	977	---	466	788	---
TOTAL	67390	71900	31043	23909	18584	25514	111670	82610	47855	18206	17626	16146
MEAN	2174	2397	1001	771	664	823	3722	2665	1595	587	569	538
MAX	3360	3450	1570	1380	904	1330	6300	5470	2730	1210	796	805
MIN	1720	1590	768	443	358	532	1610	963	645	176	381	174

CAL YR 1981 TOTAL 565888 MEAN 1550 MAX 4740 MIN 72
WTR YR 1982 TOTAL 532453 MEAN 1459 MAX 6300 MIN 174

04267500 RAQUETTE RIVER AT SOUTH COLTON, NY

LOCATION.--Lat 44°30'42", long 74°53'00", St. Lawrence County, Hydrologic Unit 04150305, on left bank 300 ft (91 m) upstream from bridge on State Highway 56 at South Colton, 500 ft (152 m) downstream from Niagara Mohawk Power Corp. powerplant, and 0.8 mi (1.3 km) upstream from Cold Brook.

DRAINAGE AREA.--937 mi² (2,427 km²), revised.

PERIOD OF RECORD.--January 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 882.05 ft (268.849 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for periods of no gage height record, Oct. 1, 7-30, Dec. 20 to Jan. 21, Jan. 26, 27, Jan. 30 to Mar. 3, and July 1-29, which are poor. Flow regulated 16 mi (26 km) upstream by Carry Falls Reservoir since 1953; considerable natural storage in large lakes above Piercefield. Large diurnal fluctuation caused by five powerplants.

AVERAGE DISCHARGE.--29 years, 1,765 ft³/s (49.98 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,720 ft³/s (275 m³/s) May 11, 1971, gage height, 9.80 ft (2.987 m); minimum, 1.3 ft³/s (0.037 m³/s) Feb. 1, 1962, Aug. 8, 1964, gage height, 1.53 ft (0.466 m); minimum daily, 4.6 ft³/s (0.13 m³/s) June 2, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,870 ft³/s (195 m³/s) Apr. 24, gage height, 8.27 ft (2.521 m); minimum, 8.4 ft³/s (0.24 m³/s) Sept. 27, gage height, 1.69 ft (0.515 m); minimum daily, 241 ft³/s (6.83 m³/s) Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4340	3270	1920	1170	1770	1770	1290	5540	1550	1570	985	728
2	3770	3050	2170	1700	1840	1540	1670	4940	1470	1440	1130	1040
3	3830	3010	1450	1170	1640	2240	1940	4570	1480	1640	1090	568
4	3810	2780	1470	1900	1500	1770	1840	3960	1350	2140	1280	672
5	3280	2850	1330	1070	1740	1360	2040	3770	2090	1540	1280	241
6	2860	2850	1720	1700	1700	1290	2440	4400	1730	1500	1080	273
7	2570	3130	1710	1500	1640	1330	1930	4910	992	1270	1220	924
8	2770	3430	1720	1470	1740	1270	2080	4660	2330	2570	931	665
9	3640	3620	1480	1640	2000	1300	1990	4510	2150	1240	1350	1000
10	3270	3620	1520	2000	2070	1280	2100	4160	3170	1700	1100	1250
11	2940	3620	1710	1240	2240	1770	1970	3730	3450	1670	1030	587
12	2970	3620	1330	1770	1970	726	2030	3780	2300	1700	1550	388
13	3740	3620	1590	1670	2510	1750	2290	3720	2740	1470	1220	733
14	3110	3620	1660	2070	2000	1360	2160	3620	2930	1500	526	1110
15	3040	3620	1690	1470	2340	1470	2530	3370	2630	1670	285	1010
16	2170	3400	1840	1900	1370	1340	2850	3010	1810	1670	1440	926
17	3710	3700	1520	1140	2440	1360	3120	2800	2090	1540	1400	974
18	3110	3770	1740	2510	1500	1750	3130	2860	1920	1240	1300	494
19	3370	2800	1340	1040	2240	1630	3160	2920	2390	1170	1440	302
20	3140	3620	1170	1840	1170	1420	3660	2630	1710	1500	1170	1040
21	3710	2700	2100	1840	2040	1390	4030	2660	1980	1540	394	778
22	2940	2800	1500	1970	1700	1380	4170	2420	1610	2270	416	905
23	3510	2920	2240	1220	1800	1700	5410	2630	1560	1300	1050	934
24	2200	2370	1340	1450	2040	1460	5700	2650	1310	1370	1010	1230
25	2510	3010	1240	1680	1400	1050	5700	2150	1770	838	854	461
26	3510	2750	1570	1570	1640	1550	5650	1970	1630	1770	1050	1090
27	2810	2760	1140	1540	871	1340	5620	1520	1800	1570	764	599
28	2910	1630	1370	1620	1800	583	5590	1920	1540	1670	660	1300
29	4710	2250	1340	1900	---	1770	5620	1220	1650	1340	412	877
30	3140	1750	1570	1600	---	1270	5770	1720	1380	1440	931	1680
31	3370	---	1670	1240	---	1740	---	1820	---	806	1160	---
TOTAL	100760	91940	49160	49600	50711	44959	99480	100540	58512	47654	31508	24779
MEAN	3250	3065	1586	1600	1811	1450	3316	3243	1950	1537	1016	826
MAX	4710	3770	2240	2510	2510	2240	5770	5540	3450	2570	1550	1680
MIN	2170	1630	1140	1040	871	583	1290	1220	992	806	285	241

CAL YR 1981 TOTAL 761660 MEAN 2087 MAX 5120 MIN 401
WTR YR 1982 TOTAL 749603 MEAN 2054 MAX 5770 MIN 241

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°50'20", long 74°58'45", St. Lawrence County, Hydrologic Unit 04150305, on right bank 250 ft (76 m) upstream from bridge on Grant Road at Raymondville, 0.3 mi (0.5 km) downstream from Trout Brook, 0.4 mi (0.6 km) downstream from Niagara Mohawk Power Corp. powerplant, and 18.0 mi (29.0 km) upstream from mouth. Water-quality sampling site at discharge station.

DRAINAGE AREA.--1,125 mi^2 (2,914 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 183.33 ft (55.879 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for winter periods and those for period of no gage height record, June 2 to July 1, which are poor. Extensive diurnal fluctuation caused by power and industrial operations. Flow regulated since 1953 by Carry Falls Reservoir, about 46 mi (74 km) upstream and by Niagara Mohawk Power Corp. powerplant, 0.4 mi (0.6 km) upstream; considerable natural storage in large lakes above Piercefield.

AVERAGE DISCHARGE.--38 years (1945-82), 2,054 ft^3/s (58.14 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft^3/s (368 m^3/s) Apr. 5, 1974, gage height, 8.40 ft (2.560 m); maximum gage height, 9.24 ft (2.816 m) Feb. 22, 1954 (backwater from ice); minimum discharge, 2.2 ft^3/s (0.062 m^3/s) Sept. 18, 19, 1966; minimum daily, 7.0 ft^3/s (0.20 m^3/s) Oct. 15, 1951; minimum gage height, 0.42 ft (0.128 m) July 13, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,270 ft^3/s (206 m^3/s) Oct. 28, gage height, 5.89 ft (1.795 m); maximum gage height, 8.74 ft (2.664 m) Jan. 27 (backwater from ice); minimum discharge, 18 ft^3/s (0.51 m^3/s) July 24, Aug. 21, gage height, 0.61 ft (0.186 m); minimum daily, 460 ft^3/s (13.0 m^3/s) Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4130	3350	2090	1600	2200	2000	4640	6430	1810	1900	1040	1100
2	4360	4080	1990	1700	2100	2100	4260	6370	1700	1800	1110	1230
3	4760	3550	1960	1800	2000	2250	3310	5430	1500	1780	1050	1160
4	4620	2830	2090	1700	1950	1900	3940	4850	1400	1770	1430	804
5	3140	2900	1930	1700	1950	2000	3330	4260	2400	1770	1430	489
6	2800	2920	1900	1600	1950	2100	2960	4450	2000	1770	1460	588
7	2970	3810	1880	1800	2000	1850	2420	5030	1300	1770	950	950
8	3700	4080	1870	2000	2050	1800	2590	5460	2700	1700	961	1190
9	4360	3990	1840	2100	2100	1750	2680	5590	2500	1740	1320	1140
10	4260	3970	1710	1950	2200	1800	2650	5880	3600	1740	1450	1210
11	3910	4070	1990	1800	2300	1800	2610	4980	3800	1740	1470	1130
12	3250	4130	1890	1800	2400	1800	2520	4360	2700	1680	1280	460
13	3680	4090	1850	1900	2500	1900	2320	4360	3000	1670	1210	886
14	3540	4010	1850	1850	2600	2000	2520	3690	3200	1700	775	1100
15	3110	4000	1870	1900	2600	2200	3190	3210	2700	1740	588	1160
16	2820	3990	1670	1950	2550	2300	3890	3850	2300	1750	844	1080
17	3180	3980	1840	2200	2550	2200	4100	3590	2200	1680	1420	1030
18	3840	3960	1840	2300	2600	2200	4170	3150	2400	1040	1470	875
19	3810	4100	1950	2100	2600	2100	4480	2900	2700	1460	1450	503
20	3970	4030	2000	2000	2400	2100	4550	3060	2200	1800	1370	995
21	4050	3720	2300	2000	2200	2300	4480	2850	2400	1800	588	973
22	3920	3680	1800	2000	2150	2630	5540	2750	2100	1420	613	995
23	3590	3520	1700	2000	2200	2670	5980	2720	1500	1680	834	1180
24	3600	3460	1550	2000	2200	2420	6200	2720	1250	1330	1030	1040
25	3250	3240	1500	2000	2100	2560	6530	2810	1650	1200	1290	814
26	3440	2770	1450	1950	1950	3450	6530	2380	1900	1250	1580	765
27	4100	2950	1400	2000	2000	3350	6610	1960	2100	1680	1230	1490
28	6510	3180	1500	2050	2000	2670	6470	1840	2150	1800	755	1150
29	6060	2960	1600	2100	---	2180	6430	1670	1900	1520	541	984
30	5430	2610	1700	2150	---	2260	6410	1800	2000	1450	865	1270
31	3900	---	1700	2200	---	3130	---	1780	---	1160	1100	---
TOTAL	122060	107930	56210	60200	62400	69770	128310	116180	67060	50290	34504	29741
MEAN	3937	3598	1813	1942	2229	2251	4277	3748	2235	1622	1113	991
MAX	6510	4130	2300	2300	2600	3450	6610	6430	3800	1900	1580	1490
MIN	2800	2610	1400	1600	1950	1750	2320	1670	1250	1040	541	460

CAL YR 1981 TOTAL 887479 MEAN 2431 MAX 6510 MIN 197
WTR YR 1982 TOTAL 904655 MEAN 2479 MAX 6610 MIN 460

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957, 1960-61, 1969-72, 1979 to current year.
CHEMICAL DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981-82 (c).
MINOR ELEMENTS DATA: 1969 (a), 1970, 1979 (b), 1980 (d), 1981-82 (b).
PESTICIDE DATA: 1970 (a).
ORGANIC DATA: OC--1979-80 (d), 1981 (c).
NUTRIENT DATA: 1955 (a), 1957 (a), 1960-61 (e), 1969 (a), 1970 (d), 1971 (b), 1972 (a), 1979-80 (d), 1981-82 (c).
BIOLOGICAL DATA:
Bacteria--1969-71 (a), 1979-80 (d), 1981-82 (c).
Phytoplankton--1979-80 (c), 1981 (b).
Periphyton--1979-80 (b).
SEDIMENT DATA: 1979 (c), 1980 (d), 1981-82 (c).

REVISIONS.--Records of specific conductance, April to September 1979, and water temperatures, October 1959 to September 1961, April to September 1979, previously published are unreliable and should not be used.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 10...	1145	3980	41	6.4	5.0	1.4	770	11.9	92	72	74	24
JAN 29...	0845	2330	38	6.3	.0	--	765	13.9	95	K170	100	--
MAR 22...	1000	2600	63	6.9	.5	2.1	755	13.6	95	K130	140	43
APR 15...	1145	3270	44	6.7	3.0	1.7	770	13.0	96	K34	K20	28
JUN 02...	1130	1770	36	6.4	19.5	1.8	755	7.4	81	92	59	20
AUG 17...	1130	1590	34	7.7	22.5	1.5	755	7.6	89	70	K1200	17

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 10...	1.0	6.5	1.9	1.5	.4	23	7.7	1.6	<.1	5.9	43	40
JAN 29...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	7.0	11	3.7	2.7	.8	36	8.6	3.7	<.1	6.6	68	59
APR 15...	8.0	7.3	2.4	2.9	.4	20	7.0	2.8	.1	6.5	44	41
JUN 02...	5.0	5.6	1.5	1.2	.4	15	7.0	1.5	<.1	4.1	41	30
AUG 17...	5.0	4.8	1.2	1.7	.3	12	7.0	1.6	<.1	3.8	45	28

K Results based on colony count outside the acceptable range (non-ideal colony count).

04268000 RAQUETTE RIVER AT RAYMONDVILLE, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 10...	.16	.030	.33	.020	.010	<.010	1	<1	100	14	<1	1
JAN 29...	.25	.070	.32	.050	.030	<.010	--	--	--	--	--	--
MAR 22...	.28	.080	.78	.170	.080	.020	1	<1	100	16	<1	<1
APR 15...	.31	.090	.27	.020	.020	.020	--	--	--	--	--	--
JUN 02...	.29	.050	.10	.010	<.010	<.010	1	<1	<100	15	<1	<1
AUG 17...	.14	.020	2.40	.020	.020	<.010	1	1	<100	13	2	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 10...	20	10	<1	--	10	--	330	140	7	--	20
JAN 29...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	20	10	1	<1	11	3	410	140	4	<1	30
APR 15...	--	--	--	--	--	--	--	--	--	--	--
JUN 02...	10	<10	<1	<1	3	2	490	100	8	1	40
AUG 17...	10	10	1	<1	7	4	150	110	8	6	20

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 10...	11	.1	<.1	1	5	<1	<1	<1	<1	50	6
JAN 29...	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	15	.1	<.1	10	<1	<1	<1	<1	<1	10	18
APR 15...	--	--	--	--	--	--	--	--	--	--	--
JUN 02...	29	.2	<.1	1	<1	<1	<1	<1	<1	20	8
AUG 17...	10	.2	<.1	2	2	<1	<1	<1	<1	20	15

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 10...	1145	3980	1	11
JAN 29...	0845	2330	2	13
MAR 22...	1000	2600	3	21
JUN 02...	1130	1770	2	9.6
AUG 17...	1130	1590	1	4.3

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY
(National stream-quality accounting network station)

LOCATION.--Lat 44°51'49", long 74°46'45", St. Lawrence County, Hydrologic Unit 04150306, on left bank 600 ft (183 m) upstream from highway bridge at Brasher Center, and 6.5 mi (10.5 km) downstream from West Branch. Water-quality sampling site at discharge station.

DRAINAGE AREA.--612 mi^2 (1,585 km^2), revised.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to current year. Monthly discharge only for some periods, published in WSP 1307.

REVISED RECORDS.--WSP 584: Drainage area. WSP 1387: 1910-16, 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 217.23 ft (66.212 m) National Geodetic Vertical Datum of 1929. Prior to June 24, 1916, nonrecording gage at site 600 ft (183 m) downstream at different datum. June 24, 1916 to Nov. 10, 1917, and Jan. 1, 1919 to Aug. 13, 1920, nonrecording gage at present site and datum.

REMARKS.--Records good except those for winter periods, which are poor. Slight diurnal fluctuation caused by powerplant operations above station.

AVERAGE DISCHARGE.--72 years, 1,045 ft^3/s (29.59 m^3/s), 23.19 in/yr (589 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft^3/s (476 m^3/s) Apr. 6, 1937, gage height, 12.82 ft (3.908 m); maximum gage height recorded, about 15.3 ft (4.66 m) Apr. 6, 1937 (ice jam), minimum discharge observed, about 34 ft^3/s (0.96 m^3/s) Aug. 8, 1917, gage height, 5.25 ft (1.600 m), minimum daily, 37 ft^3/s (1.05 m^3/s) Aug. 8, 1917.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,600 ft^3/s (159 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 1	1400	6,200	176	9.46	2.883	Apr. 18	2345	8,390	238	10.27	3.130

Minimum discharge, 174 ft^3/s (4.93 m^3/s) July 28, gage height, 5.77 ft (1.759 m) minimum daily, 196 ft^3/s (5.55 m^3/s) July 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1510	2540	1370	660	600	460	5750	1450	505	716	416	319
2	1360	2120	1310	800	600	440	4810	1330	744	599	372	403
3	1330	1800	1410	1000	620	440	3850	1190	1170	544	332	465
4	1310	1560	1390	1300	640	430	4170	1100	1020	507	306	575
5	1230	1410	1280	1400	700	410	3220	1020	907	465	279	524
6	1130	1370	1170	1400	740	410	2590	977	806	411	260	422
7	1060	1620	1000	1200	740	430	2400	885	1020	372	269	475
8	1450	1710	900	1200	740	440	2040	744	1060	344	287	442
9	1690	1740	840	1100	720	450	1740	1230	922	332	278	411
10	1580	1620	800	1000	680	480	1560	1890	854	332	284	354
11	1410	1410	760	960	660	580	1580	1620	690	305	259	311
12	1230	1320	700	920	620	800	1350	1360	590	312	242	280
13	1100	1180	680	880	600	1700	1320	1110	501	302	242	262
14	989	1100	660	820	580	1800	1710	989	432	282	253	265
15	965	1050	640	800	560	1800	2000	919	497	265	240	296
16	885	1070	620	760	540	1900	2300	841	310	254	230	339
17	896	1210	600	740	540	1800	3510	744	344	243	230	356
18	885	1330	600	720	540	1700	6820	722	461	261	230	390
19	1020	1810	580	700	520	1600	7630	701	427	279	219	420
20	1220	2040	580	660	520	1600	5790	620	419	280	245	340
21	1210	2270	580	540	520	1600	4660	630	462	259	313	290
22	1160	2270	600	620	500	1600	4170	765	595	242	326	250
23	1210	1920	620	580	500	1700	3450	744	689	226	304	230
24	1480	1610	700	560	490	1600	2850	681	1020	214	264	220
25	1450	1360	760	540	480	1600	2490	701	1020	205	427	270
26	1590	1230	740	540	470	1700	2320	600	920	205	1390	700
27	2540	1520	700	540	470	1800	2190	650	785	196	1280	600
28	4880	2320	680	540	470	1800	2030	610	682	220	965	600
29	4980	2090	660	560	---	1800	1770	561	585	419	678	980
30	3900	1640	660	600	---	1900	1620	533	757	538	550	800
31	3120	---	640	600	---	2790	---	514	---	519	533	---
TOTAL	51770	49240	25230	25340	16360	39560	93690	28431	21194	10648	12503	12589
MEAN	1670	1641	814	817	584	1276	3123	917	706	343	403	420
MAX	4980	2540	1410	1400	740	2790	7630	1890	1170	716	1390	980
MIN	885	1050	580	540	470	410	1320	514	310	196	219	220
CFSM	2.73	2.68	1.33	1.34	.95	2.09	5.10	1.50	1.15	.56	.66	.69
IN.	3.15	2.99	1.53	1.54	.99	2.40	5.69	1.73	1.29	.65	.76	.77

CAL YR 1981 TOTAL 449308 MEAN 1231 MAX 6110 MIN 337 CFSM 2.01 IN 27.31
WTR YR 1982 TOTAL 386555 MEAN 1059 MAX 7630 MIN 196 CFSM 1.73 IN 23.50

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1960, 1970-72, 1974 to current year.
CHEMICAL DATA: 1955 (a), 1960 (b), 1970-72 (a), 1975-81 (d), 1982 (c).
MINOR ELEMENTS DATA: 1975, 1977-79 (b), 1980 (c), 1981-82 (b).
ORGANIC DATA: OC--1974 (b), 1978-81 (d).
NUTRIENT DATA: 1970-71 (a), 1975-81 (d), 1982 (c).
BIOLOGICAL DATA:
Bacteria--1975-81 (d), 1982 (c).
Phytoplankton--1975-77 (d), 1978-81 (c).
Periphyton--1975-80 (b).
SEDIMENT DATA: 1975 (d), 1976-77 (c), 1978-81 (d), 1982 (c).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: September 1974 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum daily, 29.0°C Aug. 4, 1975; minimum, freezing point on many days during winter periods.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
NOV 09...	1130	1810	64	6.4	4.5	1.3	760	12.2	95	200	910	35
FEB 04...	1100	644	72	6.3	.0	--	740	13.4	94	93	41	--
MAR 15...	1115	1820	74	6.6	.0	2.2	770	14.6	99	1100	360	35
APR 12...	1145	1350	46	6.9	2.0	1.0	760	13.3	96	K40	K24	24
JUN 03...	1045	1180	68	7.1	20.0	5.5	765	8.8	97	320	160	33
AUG 18...	1200	255	77	7.7	21.5	1.9	765	9.2	103	55	130	38

DATE	HARDNESS NONCARBONATE (MG/L AS CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
NOV 09...	10	8.7	3.2	1.8	.3	25	6.9	1.8	<.1	7.2	53	45
FEB 04...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	7.0	9.1	3.0	1.8	1.0	28	8.5	3.1	<.1	7.0	58	51
APR 12...	5.0	6.3	2.1	1.4	.3	19	7.0	1.5	<.1	6.5	39	37
JUN 03...	4.0	8.6	2.8	1.5	.5	29	7.0	1.7	<.1	5.6	56	45
AUG 18...	4.0	10	3.1	2.1	.5	34	7.0	2.1	.1	5.2	62	51

K Results based on colony count outside the acceptable range (non-ideal colony count).

04269000 ST. REGIS RIVER AT BRASHER CENTER, NY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
NOV 09...	.17	.030	.35	.020	.010	<.010	1	<1	100	15	<1	1
FEB 04...	.39	.090	.49	.030	.010	.020	--	--	--	--	--	--
MAR 15...	.51	.100	.48	.030	.020	<.010	1	<1	<100	17	<1	<1
APR 12...	.30	.050	.37	.010	.020	<.010	--	--	--	--	--	--
JUN 03...	.15	.040	.20	.020	.010	<.010	1	<1	<100	17	<1	<1
AUG 18...	<.10	.040	1.20	.020	.020	<.010	1	1	<100	18	2	<1

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
NOV 09...	20	10	<1	<1	5	<1	310	200	4	1	20
FEB 04...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	10	<10	1	<1	3	2	310	140	2	2	20
APR 12...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	10	<10	<1	<1	5	1	560	240	5	3	50
AUG 18...	10	<10	2	<1	7	3	340	250	5	5	30

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 09...	8	.1	.1	1	<1	<1	<1	<1	<1	40	6
FEB 04...	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	10	.1	<.1	<1	<1	<1	<1	<1	<1	40	10
APR 12...	--	--	--	--	--	--	--	--	--	--	--
JUN 03...	17	.2	<.1	3	<1	<1	<1	<1	<1	20	7
AUG 18...	17	.1	<.1	2	2	<1	<1	<1	<1	20	10

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 09...	1130	1810	1	4.9	APR 12...	1145	1350	3	11
FEB 04...	1100	644	148	257	JUN 03...	1045	1180	5	16
MAR 15...	1115	1820	7	34	AUG 18...	1200	255	2	1.4

04270000 SALMON RIVER AT CHASM FALLS, NY

LOCATION.--Lat 44°45'22", long 74°13'09", Franklin County, Hydrologic Unit 04150307, on right bank 0.1 mi (0.2 km) downstream from Niagara Mohawk Power Corp. powerplant at Chasm Falls, and 3.0 mi (4.8 km) downstream from Duane Stream.

DRAINAGE AREA.--132 mi^2 (342 km^2).

PERIOD OF RECORD.--July 1925 to September 1982 (discontinued).

REVISED RECORDS.--WSP 729: 1931 (m). WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,011.52 ft (308.311 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Seasonal regulation of flow by upstream reservoirs. Diurnal fluctuation at low and medium flow caused by powerplant. A small diversion from tributary stream above station is used as water supply for village of Malone.

AVERAGE DISCHARGE.--57 years, 228 ft^3/s (6.457 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,890 ft^3/s (81.8 m^3/s) Apr. 25, 1926, gage height, 5.0 ft (1.52 m); minimum, 9.8 ft^3/s (0.28 m^3/s) Sept. 26, 27, 1963, minimum daily, 28 ft^3/s (0.79 m^3/s) Sept. 4, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,690 ft^3/s (76.2 m^3/s) Apr. 18, gage height, 4.65 ft (1.417 m), minimum, 15 ft^3/s (0.42 m^3/s) June 15, gage height, 0.45 ft (0.137 m); minimum daily, 52 ft^3/s (1.47 m^3/s) July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	317	480	277	165	159	143	749	341	156	156	170	119
2	296	404	327	175	185	156	673	318	220	140	132	140
3	303	350	331	200	188	145	522	297	203	148	143	143
4	324	322	309	280	206	143	578	289	156	145	117	153
5	296	309	293	450	226	153	458	277	150	135	115	130
6	268	322	262	350	216	150	425	233	176	132	112	117
7	281	374	266	300	200	153	409	182	210	122	103	143
8	407	345	270	250	191	150	404	176	182	126	99	122
9	446	331	237	210	182	143	355	247	161	115	117	113
10	382	313	226	180	179	153	309	297	150	121	117	112
11	318	301	251	165	176	173	309	230	148	106	103	103
12	302	293	251	155	173	197	297	203	140	119	98	101
13	294	266	240	150	170	223	297	197	135	112	121	99
14	267	244	247	145	167	247	399	197	128	112	128	98
15	246	244	244	140	164	226	415	191	122	105	115	119
16	257	266	237	135	176	210	534	188	140	108	105	126
17	265	309	216	130	161	206	914	188	150	108	96	117
18	254	355	210	130	167	194	2230	179	137	115	98	112
19	276	399	194	130	170	203	1810	176	130	112	99	126
20	278	389	194	125	164	210	1220	185	161	113	113	143
21	277	463	194	125	164	206	999	191	156	99	113	220
22	293	430	213	125	164	206	928	176	188	83	98	210
23	296	355	240	125	159	206	728	167	203	73	99	206
24	313	318	210	120	150	200	598	167	289	53	112	293
25	270	301	197	120	148	223	565	173	220	52	140	237
26	309	289	180	150	153	322	546	167	210	66	309	213
27	482	341	170	164	159	289	522	164	194	70	203	200
28	893	425	160	161	150	289	480	150	161	73	148	226
29	1170	355	155	161	---	277	404	150	156	173	148	216
30	869	322	150	161	---	244	369	143	191	153	130	170
31	611	---	160	161	---	374	---	145	---	135	128	---
TOTAL	11850	10215	7111	5538	4867	6414	19446	6384	5123	3480	3929	4627
MEAN	383	341	229	179	174	207	648	206	171	112	127	154
MAX	1170	480	331	450	226	374	2230	341	289	173	309	293
MIN	246	244	150	120	148	143	297	143	122	52	96	98

CAL YR 1981 TOTAL 102515 MEAN 281 MAX 1210 MIN 110
WTR YR 1982 TOTAL 88994 MEAN 244 MAX 2230 MIN 52

NOTE.--No gage-height record Dec. 26 to Jan. 25.

04270200 LITTLE SALMON RIVER AT BOMBAY, NY

LOCATION.--Lat 44°56'24", long 74°33'24", Franklin County, Hydrologic Unit 04150307, on right bank 50 ft (15 m) downstream from bridge on road to Fort Covington Center, 0.5 mi (0.8 km) east of village of Bombay, and 7.2 mi (11.6 km) upstream from mouth.

DRAINAGE AREA.--92.2 mi^2 (239 km^2), revised.

PERIOD OF RECORD.--August to November 1957, July 1958 to current year. Occasional low-flow measurements, water years 1954-55, 1957.

GAGE.--Water-stage recorder. Datum of gage is 173.91 ft (53.008 m) National Geodetic Vertical Datum of 1929. August to November 1957, at site 100 ft (30 m) upstream at datum 0.72 ft (0.219 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--24 years (1959-82), 118 ft^3/s (3.342 m^3/s), 17.38 in/yr (441 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,250 ft^3/s (92.0 m^3/s) Apr. 4, 1974, gage height, 12.90 ft (3.932 m); minimum, 8.0 ft^3/s (0.23 m^3/s) Aug. 6, 7, 1965, gage height, 1.52 ft (0.463 m), minimum gage height, 0.85 ft (0.259 m) Sept. 2, 1957, site and datum then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 900 ft^3/s (25 m^3/s):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1800	1,990	56.4	10.78	3.286

Minimum discharge, 9.4 ft^3/s (0.27 m^3/s) Aug. 23, gage height, 1.36 ft (0.414 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	218	168	68	58	48	380	75	42	41	54	23
2	116	201	173	78	64	47	260	71	44	32	42	58
3	145	185	191	92	76	47	230	70	41	35	27	64
4	160	170	171	120	96	46	290	66	40	40	22	42
5	123	163	152	290	130	46	170	62	56	28	19	30
6	111	173	138	200	90	47	140	59	78	25	18	27
7	148	270	125	150	78	48	130	60	100	22	17	42
8	244	262	110	130	75	50	120	57	51	23	15	42
9	196	423	100	110	72	52	110	164	39	18	25	31
10	155	298	94	100	69	56	100	257	34	17	21	24
11	130	222	90	85	67	58	110	132	30	16	18	19
12	116	225	88	76	66	90	120	92	29	19	15	14
13	108	180	86	70	64	180	123	76	29	21	15	15
14	108	170	84	66	63	200	207	67	29	19	14	16
15	102	168	84	64	62	170	179	60	27	17	14	21
16	100	170	84	62	61	150	164	56	33	15	13	26
17	104	193	82	60	60	140	219	53	37	14	12	26
18	101	263	82	59	60	125	469	50	30	22	11	25
19	111	527	82	58	58	115	277	46	27	28	12	26
20	115	362	82	56	56	110	186	47	33	25	12	24
21	129	545	80	56	56	110	222	61	50	19	11	22
22	159	444	86	54	54	115	207	55	65	16	11	19
23	194	273	98	54	54	130	149	46	54	15	12	26
24	265	203	110	54	52	115	126	43	94	13	15	93
25	184	184	92	52	50	130	110	45	68	12	39	76
26	377	168	84	52	50	300	99	45	56	12	134	45
27	777	351	76	52	49	190	101	44	65	12	65	46
28	1760	575	74	52	48	160	105	43	43	14	39	76
29	815	265	72	52	---	150	90	42	34	29	32	67
30	334	188	70	52	---	140	80	41	42	39	27	49
31	251	---	66	54	---	170	---	40	---	36	25	---
TOTAL	7851	8039	3174	2578	1838	3535	5273	2125	1400	694	806	1114
MEAN	253	268	102	83.2	65.6	114	176	68.5	46.7	22.4	26.0	37.1
MAX	1760	575	191	290	130	300	469	257	100	41	134	93
MIN	100	163	66	52	48	46	80	40	27	12	11	14
CFSM	2.74	2.91	1.11	.90	.71	1.24	1.91	.74	.51	.24	.28	.40
IN.	3.17	3.24	1.28	1.04	.74	1.43	2.13	.86	.56	.28	.33	.45

CAL YR 1981 TOTAL 60167 MEAN 165 MAX 1760 MIN 32 CFSM 1.79 IN 24.28
WTR YR 1982 TOTAL 38427 MEAN 105 MAX 1760 MIN 11 CFSM 1.14 IN 15.50

04270510 CHATEAUGAY RIVER BELOW CHATEAUGAY, NY

LOCATION.--Lat 44°57'49", long 74°07'53", Franklin County, Hydrologic Unit 04150307, on left bank 10 ft (3 m) downstream from bridge on Sam Cook Road, 0.2 mi (0.3 km) downstream from Marble River, 2.4 mi (3.9 km) upstream from international boundary, and 4.1 mi (6.6 km) northeast of Chateaugay.

DRAINAGE AREA.--151 mi^2 (391 km^2).

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 411.33 ft (125.373 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated at Forge Dam on Upper and Lower Chateaugay Lakes.

AVERAGE DISCHARGE.--16 years (1967-82), 250 ft^3/s (7.080 m^3/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft^3/s (147 m^3/s) Apr. 4, 1974, gage height, 7.33 ft (2.234 m), from rating curve extended above 1,600 ft^3/s (45.3 m^3/s), maximum gage height, 10.99 ft (3.350 m) Feb. 11, 1966 (ice jam), minimum discharge, 14 ft^3/s (0.40 m^3/s) Sept. 5, 6, 1982, gage height, 2.32 ft (0.707 m), result of regulation, minimum daily, 37 ft^3/s (1.05 m^3/s) Aug. 23, 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,010 ft^3/s (56.9 m^3/s) Oct. 28, gage height, 5.70 ft (1.74 m), maximum recorded gage height, 6.37 ft^3/s (1.94 m) Jan. 21 (ice jam), but may have been higher during period of no gage height record, Jan. 22-23, minimum, 14 ft^3/s (0.40 m^3/s) Sept. 5, 6, gage height, 2.32 ft (0.707 m), result of regulation; minimum daily, 76 ft^3/s (2.15 m^3/s) Sept. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	549	671	303	213	210	170	927	283	128	120	88	139
2	508	658	336	189	250	160	605	279	146	122	86	177
3	478	623	363	234	320	160	708	279	128	126	83	155
4	425	597	337	320	350	160	750	248	128	124	83	130
5	398	518	322	302	370	160	610	208	146	120	86	88
6	376	481	300	267	350	170	564	177	160	120	83	96
7	393	491	300	240	340	170	539	160	174	120	81	99
8	425	456	290	226	330	170	518	157	165	117	81	85
9	383	506	290	230	310	180	486	230	162	103	107	81
10	361	426	280	230	300	180	455	213	160	86	83	75
11	354	392	280	220	290	190	434	213	144	88	79	78
12	349	383	282	220	280	250	411	224	148	86	83	78
13	344	359	294	220	270	400	425	227	141	85	90	78
14	337	344	293	220	250	457	446	230	141	83	81	78
15	331	328	292	210	240	331	427	224	126	81	79	101
16	290	294	285	210	230	285	482	227	128	78	79	86
17	254	304	290	210	230	262	702	222	122	78	81	85
18	243	369	280	210	230	265	1060	205	96	86	79	83
19	236	387	280	200	220	295	1040	203	96	86	79	83
20	232	386	270	200	210	299	987	203	101	81	79	78
21	229	443	270	200	210	284	987	190	101	81	78	76
22	235	353	260	200	200	276	936	157	103	78	78	76
23	258	327	260	190	190	271	878	148	115	85	83	92
24	253	309	250	190	190	278	776	150	126	78	81	109
25	236	299	240	190	190	368	537	150	144	83	122	86
26	396	293	230	190	180	509	514	146	169	81	117	83
27	567	526	220	190	180	449	497	141	155	78	141	113
28	1360	430	210	190	170	384	433	141	150	86	155	139
29	705	331	200	190	---	358	347	139	132	90	172	120
30	695	312	200	190	---	409	295	137	137	81	179	98
31	682	---	200	190	---	917	---	130	---	98	160	---
TOTAL	12882	12596	8507	6681	7090	9217	18776	6041	4072	2909	3036	2941
MEAN	416	420	274	216	253	297	626	195	136	93.8	97.9	98.0
MAX	1360	671	363	320	370	917	1060	283	174	126	179	177
MIN	229	293	200	189	170	160	295	130	96	78	78	76

CAL YR 1981 TOTAL 103552 MEAN 284 MAX 1360 MIN 98
WTR YR 1982 TOTAL 94748 MEAN 260 MAX 1360 MIN 76

04273500 SARANAC RIVER AT PLATTSBURGH, NY

LOCATION.--Lat 44°40'54", long 73°28'18", Clinton County, Hydrologic Unit 02010006, on right bank at Plattsburgh, 600 ft (183 m) downstream from Imperial Paper and Color Corp. dam, 3.0 mi (4.8 km) upstream from mouth, and 5.5 mi (8.8 km) downstream from Mead Brook.

DRAINAGE AREA.--608 mi² (1,575 km²). Prior to September 1930, 607 mi² (1,572 km²).

PERIOD OF RECORD.--March 1903 to September 1930, October 1943 to current year. Published as "near Plattsburgh," 1903-30.

REVISED RECORDS.--WSP 345: Drainage area. WSP 384: 1909-10 (monthly discharge only). WSP 1387: 1907-8. WSP 1437: 1908 (minimum daily only).

GAGE.--Water-stage recorder. Datum of gage is 155.74 ft (47.470 m) National Geodetic Vertical Datum of 1929. Prior to Nov. 12, 1919, nonrecording gage and Nov. 12, 1919 to Sept. 30, 1930, water-stage recorder, at site 1.5 mi (2.4 km) upstream at different datum.

REMARKS.--Records excellent except those for January, which are good. Considerable diurnal fluctuation caused by power and industrial operations. Slight regulation by storage in Upper and Lower Saranac Lakes and elsewhere. During year, city of Plattsburgh diverted an average of 7.82 ft³/s (0.221 m³/s) from Saranac River and Mead and West Brooks, tributaries above station, for municipal supply. About 1 ft³/s (0.028 m³/s) diverted from Great Chazy River basin into Saranac River for water supply of State Institutions at Dannemora.

AVERAGE DISCHARGE.--66 years, 834 ft³/s (23.62 m³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Apr. 8, 1928, from computation of flow over dam and through waste gates and powerplant; minimum daily, 3.6 ft³/s (0.102 m³/s) June 26, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,600 ft³/s (272 m³/s) Apr. 18, gage height, 9.72 ft (2.963 m); minimum, 22.0 ft³/s (0.623 m³/s) July 14, gage height 1.60 ft (0.488 m); minimum daily discharge, 114 ft³/s (3.228 m³/s) Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1180	1780	923	615	560	530	2140	1700	486	655	163	500
2	1120	1610	1060	577	577	545	2290	1600	732	561	255	471
3	1090	1440	1030	491	582	556	1920	1480	980	621	408	467
4	1070	1340	995	551	678	561	2680	1440	959	626	362	476
5	1030	1260	980	655	690	525	2160	1380	937	505	335	476
6	1000	988	973	744	678	471	1760	1310	966	582	288	481
7	1050	1310	828	861	655	510	1470	1260	1090	577	261	678
8	1170	1110	726	751	660	510	1350	1230	1130	535	278	387
9	1240	1060	510	684	643	462	1320	1340	1010	556	551	128
10	1170	1050	610	640	626	453	1290	1650	930	462	481	131
11	1090	1060	702	600	626	448	1170	1520	916	610	530	114
12	1040	1050	841	580	615	471	1260	1390	895	264	453	201
13	1000	1000	888	560	582	690	1260	1310	643	421	444	320
14	980	1010	881	540	582	666	1290	1210	632	316	462	239
15	944	959	808	540	593	708	1490	1160	643	350	505	278
16	916	959	738	520	604	834	1730	1090	632	342	471	320
17	909	1010	690	500	604	789	2940	1040	643	426	462	313
18	757	1180	738	490	604	672	7770	973	621	251	457	430
19	708	1270	702	480	593	720	5390	930	370	342	471	362
20	1090	1260	621	470	615	714	4240	1220	491	505	467	313
21	828	1420	604	460	660	684	3730	848	643	476	462	320
22	638	1420	638	450	666	726	3310	643	610	316	374	435
23	720	1260	615	430	684	720	2750	599	643	168	288	309
24	902	1130	520	430	666	738	2530	577	782	338	161	412
25	888	1090	615	450	655	795	2430	690	808	354	192	561
26	916	1070	638	460	660	1020	2340	566	726	281	448	444
27	1280	1060	655	480	655	1090	2270	577	702	171	505	421
28	2720	1160	643	490	615	902	2080	708	638	239	535	632
29	3300	1150	649	520	---	930	1950	324	577	230	510	566
30	2460	1060	621	540	---	966	1820	320	660	209	515	520
31	2040	---	577	540	---	1050	---	556	---	176	467	---
TOTAL	37246	35526	23019	17099	17628	21456	72130	32641	22495	12465	12561	11705
MEAN	1201	1184	743	552	630	692	2404	1053	750	402	405	390
MAX	3300	1780	1060	861	690	1090	7770	1700	1130	655	551	678
MIN	638	959	510	430	560	448	1170	320	370	168	161	114

CAL YR 1981 TOTAL 328941 MEAN 901 MAX 3450 MIN 117
WTR YR 1982 TOTAL 315971 MEAN 866 MAX 7770 MIN 114

04273900 LAKE PLACID AT LAKE PLACID, NY

LOCATION.--Lat 44°17'42", long 73°59'26", Essex County, Hydrologic Unit 02010004, on south shore of East Lake on Victor Herbert Drive, and 400 ft (122 m) north of State Highway 86 in village of Lake Placid.

DRAINAGE AREA.--20.1 mi^2 (52.1 km^2) at outlet 0.7 mi (1.1 km) northwest of gage.

PERIOD OF RECORD.--November 1959 to September 1982 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,859.42 ft (566.751 m) May 3, 1972; minimum, 1,857.60 ft (566.196 m) Oct. 2, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,859.10 ft (566.654 m) Apr. 18, minimum, 1,857.82 ft (566.264 m) July 27, 28.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1858.49	1858.57	1858.30	1858.18	1858.19	1858.06	1858.26	1858.56	1858.25	1858.31	1858.06	1858.11
2	1858.45	1858.52	1858.30	1858.17	1858.19	1858.06	1858.31	1858.54	1858.54	1858.27	1858.07	1858.12
3	1858.42	1858.47	1858.29	1858.16	1858.20	1858.05	1858.33	1858.50	1858.58	1858.27	1858.07	1858.10
4	1858.40	1858.43	1858.28	1858.18	1858.21	1858.05	1858.39	1858.48	1858.53	1858.24	1858.06	1858.09
5	1858.38	1858.40	1858.27	1858.22	1858.20	1858.05	1858.39	1858.45	1858.49	1858.22	1858.06	1858.07
6	1858.37	1858.40	1858.26	1858.22	1858.21	1858.04	1858.37	1858.43	1858.53	1858.20	1858.05	1858.06
7	1858.41	1858.41	1858.24	1858.21	1858.19	1858.06	1858.36	1858.42	1858.55	1858.19	1858.04	1858.06
8	1858.49	1858.40	1858.25	1858.20	1858.19	1858.08	1858.33	1858.42	1858.52	1858.18	1858.04	1858.03
9	1858.54	1858.38	1858.26	1858.20	1858.19	1858.08	1858.30	1858.48	1858.47	1858.16	1858.09	1858.02
10	1858.54	1858.35	1858.24	1858.19	1858.19	1858.07	1858.28	1858.54	1858.42	1858.15	1858.10	1858.00
11	1858.50	1858.34	1858.23	1858.18	1858.18	1858.07	1858.27	1858.52	1858.38	1858.13	1858.08	1857.98
12	1858.46	1858.32	1858.21	1858.17	1858.17	1858.08	1858.26	1858.48	1858.35	1858.11	1858.09	1857.98
13	1858.43	1858.30	1858.21	1858.17	1858.16	1858.08	1858.26	1858.45	1858.31	1858.10	1858.10	1857.97
14	1858.40	1858.28	1858.21	1858.16	1858.16	1858.09	1858.25	1858.42	1858.29	1858.09	1858.11	1857.96
15	1858.37	1858.28	1858.21	1858.16	1858.14	1858.08	1858.25	1858.38	1858.27	1858.07	1858.11	1857.98
16	1858.36	1858.28	1858.22	1858.15	1858.13	1858.08	1858.27	1858.36	1858.25	1858.06	1858.10	1858.00
17	1858.36	1858.29	1858.22	1858.15	1858.12	1858.08	1858.41	1858.34	1858.25	1858.04	1858.09	1857.98
18	1858.35	1858.31	1858.21	1858.13	1858.11	1858.08	1859.02	1858.31	1858.23	1858.03	1858.08	1857.97
19	1858.37	1858.33	1858.20	1858.13	1858.11	1858.08	1859.00	1858.30	1858.20	1858.02	1858.06	1857.96
20	1858.36	1858.34	1858.19	1858.13	1858.10	1858.08	1858.90	1858.32	1858.19	1858.00	1858.10	1857.95
21	1858.35	1858.39	1858.19	1858.12	1858.10	1858.08	1858.89	1858.37	1858.20	1857.98	1858.08	1857.94
22	1858.36	1858.41	1858.19	1858.11	1858.09	1858.09	1858.83	1858.35	1858.22	1857.95	1858.05	1857.93
23	1858.36	1858.39	1858.21	1858.13	1858.08	1858.10	1858.73	1858.33	1858.30	1857.93	1858.05	1857.94
24	1858.37	1858.37	1858.21	1858.15	1858.08	1858.09	1858.69	1858.32	1858.38	1857.91	1858.10	1857.98
25	1858.35	1858.34	1858.19	1858.15	1858.08	1858.09	1858.70	1858.31	1858.37	1857.89	1858.13	1857.98
26	1858.37	1858.32	1858.19	1858.14	1858.07	1858.12	1858.74	1858.30	1858.37	1857.87	1858.17	1857.97
27	1858.50	1858.33	1858.18	1858.13	1858.07	1858.14	1858.77	1858.29	1858.35	1857.85	1858.16	1858.00
28	1858.73	1858.34	1858.18	1858.12	1858.07	1858.14	1858.74	1858.27	1858.32	1857.92	1858.16	1858.02
29	1858.79	1858.33	1858.19	1858.12	---	1858.13	1858.66	1858.26	1858.32	1858.06	1858.15	1858.03
30	1858.72	1858.32	1858.18	1858.12	---	1858.13	1858.60	1858.25	1858.33	1858.05	1858.13	1858.02
31	1858.64	---	1858.17	1858.14	---	1858.16	---	1858.25	---	1858.05	1858.12	---
MEAN	1858.45	1858.36	1858.22	1858.16	1858.14	1858.09	1858.52	1858.39	1858.36	1858.07	1858.09	1858.01
MAX	1858.79	1858.57	1858.30	1858.22	1858.21	1858.16	1859.02	1858.56	1858.58	1858.31	1858.17	1858.12
MIN	1858.35	1858.28	1858.17	1858.11	1858.07	1858.04	1858.25	1858.25	1858.19	1857.85	1858.04	1857.93

CAL YR 1981 MEAN 1858.31 MAX 1859.04 MIN 1858.04
WTR YR 1982 MEAN 1858.24 MAX 1859.02 MIN 1857.85

04275000 EAST BRANCH AUSABLE RIVER AT AU SABLE FORKS, NY

LOCATION.--Lat 44°26'20", long 73°40'55", Essex County, Hydrologic Unit 02010004, on left bank 700 ft (213 m) upstream from bridge on Burt Street in Au Sable Forks, and 0.5 mi (0.8 km) upstream from confluence with West Branch.

DRAINAGE AREA.--198 mi^2 (513 km^2).

PERIOD OF RECORD.--September 1924 to current year.

REVISED RECORDS.--WSP 759: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 545.37 ft (166.229 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1938, nonrecording gage at lower highway bridge in Au Sable Forks, 400 ft (122 m) upstream from confluence with West Branch at datum 3.54 ft (1.079 m) lower.

REMARKS.--Records good except those for winter periods, which are poor. Occasional regulation of storage in Upper and Lower Ausable Lakes and occasional small diurnal fluctuation, cause unknown.

AVERAGE DISCHARGE.--58 years, 310 ft^3/s (8.779 m^3/s), 21.27 in/yr (540 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,100 ft^3/s (569 m^3/s) Sept. 22, 1938, gage height, 12.91 ft (3.935 m), from rating curve extended above 5,800 ft^3/s (164 m^3/s) on basis of velocity-area studies; minimum observed, 20 ft^3/s (0.57 m^3/s) Aug. 11, 14, 28, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,700 ft^3/s (105 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1500	5,860	166	7.24	2.207
Apr. 18	0500	*7,990	226	*8.34	2.542

Minimum discharge, 40 ft^3/s (1.133 m^3/s) July 27, 28, gage height 0.99 ft (0.302 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	517	204	120	140	74	1630	884	211	284	105	69
2	270	429	220	120	170	76	843	931	1090	217	103	71
3	320	367	210	150	180	78	665	812	597	232	103	135
4	320	322	190	250	190	90	1160	733	385	211	88	141
5	320	289	180	400	200	96	629	625	309	168	80	111
6	270	315	170	250	180	110	458	674	583	143	96	91
7	400	385	160	200	170	110	370	800	1090	125	84	81
8	541	325	160	180	160	100	347	1030	617	112	75	70
9	645	303	160	150	150	100	324	1490	404	99	294	64
10	491	274	160	140	140	90	277	1430	299	87	282	58
11	374	257	160	130	130	90	263	856	235	79	180	52
12	310	236	160	130	120	150	261	638	204	77	123	49
13	269	208	160	120	96	220	260	559	174	76	99	47
14	240	205	160	120	100	270	350	519	167	69	99	45
15	224	202	160	110	110	220	366	460	154	64	95	52
16	214	221	164	100	110	200	601	419	150	60	78	76
17	235	278	160	96	100	170	2530	379	156	57	68	74
18	217	367	150	90	100	150	5210	350	166	55	62	67
19	467	381	140	82	96	130	1630	329	150	53	55	65
20	408	361	130	80	92	120	1380	677	180	50	64	59
21	339	542	140	78	90	120	2100	664	182	48	72	56
22	312	439	140	78	86	110	1300	467	227	46	59	55
23	297	339	150	78	80	110	847	353	561	44	55	56
24	518	273	150	78	78	160	987	325	741	43	76	96
25	380	262	150	78	76	240	1630	351	416	43	78	119
26	358	242	140	78	74	350	1950	314	304	42	468	99
27	1670	243	140	82	72	310	2240	266	262	41	224	119
28	3830	275	130	90	72	270	1460	226	205	60	147	320
29	1870	234	130	100	---	220	924	203	192	193	113	261
30	971	209	130	120	---	200	742	201	378	116	94	228
31	661	---	120	130	---	600	---	188	---	78	80	---
TOTAL	18031	9300	4878	4008	3362	5334	33734	18153	10789	3072	3699	2886
MEAN	582	310	157	129	120	172	1124	586	360	99.1	119	96.2
MAX	3830	542	220	400	200	600	5210	1490	1090	284	468	320
MIN	214	202	120	78	72	74	260	188	150	41	55	45
CFSM	2.94	1.57	.79	.65	.61	.87	5.68	2.96	1.82	.50	.60	.49
IN.	3.39	1.75	.92	.75	.63	1.00	6.34	3.41	2.03	.58	.69	.54

CAL YR 1981 TOTAL 128383 MEAN 352 MAX 3830 MIN 48 CFSM 1.78 IN 24.12
WTR YR 1982 TOTAL 117246 MEAN 321 MAX 5210 MIN 41 CFSM 1.62 IN 22.03

04276895 WEST BROOK AT LAKE GEORGE, NEW YORK

LOCATION.--Lat 43°25'02", long 73°42'44", Warren County, Hydrologic Unit 02010001, on right bank 0.2 mi (0.3 km) upstream of mouth.

DRAINAGE AREA.--8.38 mi^2/s (21.7 km^2).

PERIOD OF RECORD.--June 1980 to current year.

GAGE.--Water stage recorder. Altitude of gage is 330 ft (101 m), from topographic map.

REMARKS.--Records fair. Effluent from Village of Lake George sewage treatment plant discharged to sand and gravel aquifer adjacent to West Brook, 0.6 mi (1.0 km) upstream from gage. Principal source of effluent is diversions from Lake George for municipal supply.

COOPERATION.--Figures of effluent discharge supplied by Village of Lake George, New York.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 301 ft^3/s (8.52 m^3/s) Feb. 20, 1981, gage height 2.91 ft (0.887 m), from rating curve extended above 50 ft^3/s (1.42 m^3/s); minimum, 5.0 ft^3/s (0.142 m^3/s) Aug. 7-8, 1980, Oct. 13-18, 1980, Nov. 3-8, 1980, gage height, 0.45 ft (0.137 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.248 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	0700	202	5.72	2.17	0.661	Apr. 18	0245	*278	7.87	*2.80	0.853
Mar. 31	2345	172	4.87	2.20	0.671						

Minimum discharge, 5.5 ft^3/s (0.156 m^3/s), part of each day Sept. 15-27, 29, 30; minimum gage height 0.54 ft (0.165 m), Oct. 16, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.3	17	10	9.4	13	9.9	96	27	20	17	9.4	6.7
2	7.7	16	13	8.5	11	10	55	25	23	15	8.4	7.5
3	9.0	16	13	8.1	18	9.4	68	24	20	13	8.4	6.7
4	8.1	16	12	22	34	9.4	81	23	18	13	8.0	6.7
5	7.7	13	12	31	24	9.9	49	22	20	12	8.0	6.3
6	8.1	17	11	20	19	9.4	38	22	35	12	7.5	6.7
7	10	17	11	17	16	9.4	35	21	32	12	7.5	6.3
8	9.0	14	11	14	14	9.4	32	20	25	12	7.5	6.3
9	8.1	14	11	12	14	9.4	30	20	22	11	8.4	6.3
10	7.7	13	10	9.9	14	9.4	29	20	19	11	9.9	6.3
11	7.3	12	10	9.4	12	9.9	28	18	17	10	8.0	6.3
12	6.9	12	10	9.0	12	11	28	18	17	12	7.5	6.3
13	6.9	12	9.9	8.5	12	14	29	17	18	10	7.5	6.3
14	6.9	11	9.9	8.5	12	17	36	17	22	9.9	8.0	6.3
15	6.9	11	9.9	9.4	12	15	42	16	19	9.9	7.5	5.9
16	6.9	11	9.9	9.9	12	14	53	15	19	9.9	7.5	6.3
17	6.5	11	9.4	9.9	12	14	89	15	24	9.9	7.5	5.9
18	8.1	11	9.4	10	11	14	141	15	21	9.4	7.5	5.5
19	10	11	8.5	10	11	15	71	17	18	9.4	7.1	5.5
20	8.5	14	7.7	11	11	16	65	26	17	8.9	7.1	5.5
21	7.7	18	7.7	10	11	17	69	18	16	8.9	7.1	5.5
22	7.7	14	7.7	9.9	11	19	53	16	15	8.9	6.7	5.5
23	11	12	11	9.9	11	20	43	17	17	8.9	6.7	7.1
24	18	11	11	10	10	22	42	38	15	8.4	6.7	5.9
25	12	11	10	10	10	29	40	29	14	8.9	7.1	5.5
26	13	11	9.4	9.4	9.9	65	39	23	15	8.9	6.7	5.5
27	52	11	9.0	9.4	10	38	48	20	14	8.4	6.7	7.1
28	83	11	9.4	9.4	9.9	28	37	18	13	12	6.7	5.9
29	32	11	9.9	9.4	---	26	32	22	24	9.4	6.7	5.5
30	23	10	9.0	9.4	---	28	29	21	26	8.4	6.7	5.5
31	20	---	9.0	9.4	---	65	---	20	---	8.9	6.7	---
TOTAL	437.0	389	311.7	353.7	376.8	592.5	1527	640	595	327.3	232.7	184.6
MEAN	14.1	13.0	10.1	11.4	13.5	19.1	50.9	20.6	19.8	10.6	7.51	6.15
MAX	83	18	13	31	34	65	141	38	35	17	9.9	7.5
MIN	6.5	10	7.7	8.1	9.9	9.4	28	15	13	8.4	6.7	5.5
‡	0.75	0.57	0.53	0.69	0.69	0.79	1.2	1.0	1.2	1.5	1.5	0.85

CAL YR 1981 TOTAL 4215.4 MEAN 11.5 MAX 104 MIN 5.2 ‡ 0.86
WTR YR 1982 TOTAL 5967.3 MEAN 16.3 MAX 141 MIN 5.5 ‡ 0.94

‡ Discharge, in cubic feet per second, from sewage treatment plant upstream from gage.

04276920 ENGLISH BROOK AT LAKE GEORGE, NY

LOCATION.--Lat 43°25'54", long 73°42'26", Warren County, Hydrologic Unit 0201001, on left bank 400 ft (122 m) upstream from mouth and 0.1 mi (0.2 km) downstream from culvert on State Highway 9N.

DRAINAGE AREA.--7.84 mi^2 (20.3 km^2).

PERIOD OF RECORD.--June 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 330 ft (101 m), from topographic map.

REMARKS.--Records fair, except during periods affected by backwater from ice, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 311 ft^3/s (8.81 m^3/s) Apr. 18, 1982, gage height 2.60 ft (0.792 m), from rating curve extended above 110 ft^3/s (3.12 m^3/s); maximum gage height 4.88 ft (1.487 m) Feb. 11, 1981 (ice jam); minimum discharge 0.75 ft^3/s (0.021 m^3/s), Aug. 18, 19, 1980, gage height 0.36 ft (0.110 m).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft^3/s (4.25 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Oct. 28	1030	222	6.29	2.44	0.744
Jan. 13	1530	Unknown		*a3.77	1.149
Feb. 4	Unknown	b290	8.21	a3.45	1.052
Mar. 31	2320	193	5.47	2.20	0.671
Apr. 18	0400	*311	8.81	2.60	0.792

a Ice jam.
b Estimated.

Minimum discharge, 0.76 ft^3/s (0.022 m^3/s) several days in September, gage height, 0.46 ft (0.140 m).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	25	9.3	9.4	7.8	8.0	121	19	11	18	3.3	1.0
2	8.2	21	14	9.2	8.5	8.0	64	17	20	12	2.7	1.2
3	10	18	14	9.2	20	7.7	65	16	14	10	2.7	1.2
4	8.7	17	13	25	150	7.7	96	15	11	9.2	2.2	1.1
5	8.0	16	12	54	62	7.6	53	14	14	7.6	2.0	1.0
6	8.4	23	12	20	27	7.6	41	14	49	7.0	2.0	.93
7	11	22	11	15	20	7.4	37	14	47	6.4	1.9	.84
8	9.7	19	11	13	16	7.2	30	13	25	6.4	1.9	.84
9	8.4	17	11	11	14	7.2	27	12	17	5.4	2.4	.84
10	8.0	15	10	9.4	13	7.2	25	12	13	4.9	4.0	.84
11	7.5	15	10	9.0	12	7.7	25	12	11	4.2	2.4	.84
12	7.3	15	10	8.4	12	9.2	26	11	9.5	4.9	2.0	.84
13	7.3	14	9.4	8.2	9.7	16	29	9.8	11	4.2	2.2	.76
14	6.8	13	9.4	8.2	9.2	21	43	9.2	15	3.8	2.2	.76
15	6.8	13	9.4	8.6	9.4	17	49	8.8	12	3.4	2.2	.94
16	6.8	13	9.7	9.0	9.4	14	68	8.2	12	3.4	2.0	1.0
17	6.8	13	9.2	9.0	9.4	14	136	7.9	18	3.3	1.7	.93
18	8.9	12	9.4	9.0	8.9	13	176	7.3	14	3.4	1.6	.93
19	13	11	9.0	9.0	8.9	14	79	8.2	12	3.8	1.6	.84
20	9.7	19	8.0	8.8	8.9	16	85	12	18	3.3	1.6	.84
21	8.9	28	7.8	8.8	8.9	18	93	8.5	12	2.9	1.4	.84
22	8.2	21	8.6	8.4	8.7	20	51	7.3	11	2.5	1.2	.84
23	16	18	11	8.2	8.7	21	38	9.5	13	2.4	1.2	2.4
24	31	15	13	8.2	8.7	25	42	37	11	2.0	1.2	1.6
25	17	14	10	8.2	8.2	35	43	25	8.8	1.9	1.5	1.1
26	19	13	10	8.2	8.2	78	42	16	8.5	1.9	1.5	.93
27	82	12	9.7	7.7	8.0	49	66	11	7.9	1.7	1.4	2.4
28	133	10	9.4	8.0	8.2	36	37	9.2	8.8	4.0	1.1	1.9
29	63	9.7	9.4	7.7	---	29	26	13	31	4.2	1.0	1.5
30	44	8.7	10	7.6	---	34	22	13	40	2.7	1.0	1.2
31	30	---	9.4	7.5	---	87	---	12	---	2.7	1.0	---
TOTAL	620.9	480.4	319.1	350.9	503.7	649.5	1735	401.9	505.5	153.5	58.1	33.18
MEAN	20.0	16.0	10.3	11.3	18.0	21.0	57.8	13.0	16.9	4.95	1.87	1.11
MAX	133	28	14	54	150	87	176	37	49	18	4.0	2.4
MIN	6.8	8.7	7.8	7.5	7.8	7.2	22	7.3	7.9	1.7	1.0	.76

CAL YR 1981 TOTAL 4347.10 MEAN 11.9 MAX 133 MIN 1.4
WTR YR 1982 TOTAL 5811.68 MEAN 15.9 MAX 176 MIN .76

04278000 LAKE GEORGE AT ROGERS ROCK, NY

LOCATION.--Lat 43°48'28", long 73°27'30", Essex County, Hydrologic Unit 02010001, on west shore about 500 ft (152 m) north of Hooper's dock at Rogers Rock, and 0.4 mi (0.6 km) west of Baldwin.

DRAINAGE AREA.--233 mi2 (603 km2) at outlet at Ticonderoga.

PERIOD OF RECORD.--July 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 315.93 ft (96.295 m) National Geodetic Vertical Datum, adjustment of 1912. Prior to Nov. 4, 1929, nonrecording gages at several sites within a half mile of present site at same datum. Nov. 4, 1929 to Sept. 26, 1936, nonrecording gage at present site and datum.

REMARKS.--Elevation of lake regulated by floodgates at Ticonderoga. Prior to October 1974, lake was regulated by powerplant wheel gate and floodgates. Lake George has been controlled by a dam at its outlet for more than 100 years. Area of water surface is 44 mi2 (114 km2).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height observed, 5.09 ft (1.551 m) Apr. 9, 1936; minimum, 0.64 ft (0.195 m) Dec. 20, 1941.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.42 ft (1.347 m) Apr. 21; minimum, 2.68 ft (0.817 m) Mar. 5.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.74	3.99	3.57	3.47	3.20	2.79	3.83	4.04	3.83	3.92	3.42	3.09
2	3.74	3.95	3.59	3.45	3.19	2.78	3.90	3.98	3.87	3.91	3.35	3.13
3	3.75	3.89	3.59	3.45	3.25	2.77	3.95	3.95	3.82	3.81	3.35	3.17
4	3.74	3.82	3.59	3.52	3.34	2.77	4.12	3.90	3.81	3.76	3.37	3.12
5	3.71	3.78	3.55	3.69	3.34	2.78	4.18	3.87	3.79	3.74	3.31	3.12
6	3.70	3.75	3.55	3.66	3.34	2.77	4.15	3.84	3.82	3.70	3.33	3.06
7	3.74	3.72	3.55	3.63	3.34	2.80	4.17	3.82	3.88	3.68	3.35	2.99
8	3.68	3.68	3.51	3.62	3.31	2.85	4.15	3.81	3.91	3.63	3.36	3.05
9	3.64	3.62	3.54	3.57	3.27	2.84	4.10	3.78	3.91	3.61	3.38	3.05
10	3.64	3.57	3.53	3.57	3.28	2.84	4.06	3.74	3.90	3.55	3.40	3.05
11	3.60	3.53	3.50	3.55	3.26	2.84	4.03	3.73	3.92	3.56	3.38	3.03
12	3.59	3.45	3.49	3.48	3.22	2.82	4.00	3.73	3.89	3.57	3.34	3.02
13	3.57	3.45	3.49	3.42	3.19	2.86	3.98	3.70	3.91	3.51	3.32	3.02
14	3.56	3.43	3.49	3.40	3.16	2.90	3.98	3.68	3.90	3.49	3.35	3.02
15	3.56	3.43	3.44	3.39	3.16	2.89	3.95	3.69	3.89	3.50	3.34	2.98
16	3.53	3.45	3.50	3.37	3.11	2.90	3.96	3.68	3.90	3.51	3.35	3.06
17	3.52	3.47	3.50	3.35	3.07	2.95	4.00	3.65	3.88	3.52	3.33	3.01
18	3.59	3.50	3.44	3.32	3.06	2.98	4.22	3.67	3.90	3.52	3.31	3.04
19	3.62	3.52	3.47	3.36	3.05	2.99	4.28	3.71	3.89	3.52	3.33	3.00
20	3.60	3.55	3.47	3.25	3.03	3.01	4.31	3.69	3.94	3.42	3.31	3.00
21	3.56	3.63	3.51	3.22	3.00	3.05	4.34	3.66	3.93	3.40	3.23	2.98
22	3.51	3.63	3.45	3.12	2.97	3.11	4.30	3.69	3.91	3.40	3.26	2.95
23	3.57	3.61	3.48	3.11	2.96	3.12	4.31	3.71	3.93	3.38	3.25	3.01
24	3.63	3.59	3.47	3.15	2.91	3.16	4.24	3.77	3.92	3.39	3.21	3.02
25	3.65	3.57	3.47	3.10	2.91	3.19	4.22	3.78	3.92	3.41	3.25	3.00
26	3.67	3.56	3.44	3.05	2.87	3.33	4.18	3.80	3.89	3.37	3.23	2.99
27	3.84	3.61	3.40	3.05	2.85	3.48	4.17	3.80	3.89	3.34	3.25	3.00
28	3.95	3.61	3.45	3.06	2.79	3.56	4.08	3.80	3.90	3.37	3.19	3.04
29	4.06	3.58	3.48	3.06	---	3.58	4.11	3.80	3.91	3.42	3.17	3.01
30	4.06	3.57	3.46	3.04	---	3.61	4.08	3.80	3.96	3.41	3.18	3.04
31	4.03	---	3.45	3.04	---	3.65	---	3.81	---	3.40	3.13	---
MEAN	3.69	3.62	3.50	3.34	3.12	3.03	4.11	3.78	3.89	3.54	3.30	3.04
MAX	4.06	3.99	3.59	3.69	3.34	3.65	4.34	4.04	3.96	3.92	3.42	3.17
MIN	3.51	3.43	3.40	3.04	2.79	2.77	3.83	3.65	3.79	3.34	3.13	2.95

WTR YR 1982 MEAN 3.50 MAX 4.34 MIN 2.77

STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04278300 NORTHWEST BAY BROOK NEAR BOLTON LANDING, NY

LOCATION.--Lat 43°39'48", long 73°36'14", Warren County, Hydrologic Unit 02010001, on left bank 10 ft (3 m) downstream from county bridge on Padanarum Road, 7.7 mi (12.4 km) north of Bolton Landing.

DRAINAGE AREA.--23.4 mi² (61.6 km²).

PERIOD OF RECORD.--October 1965 to September 1968, October 1971 to current year. Annual maximum, water years 1969-71.

GAGE.--Water-stage recorder. Datum of gage is 423.60 ft (129.113 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1973, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records fair except those for winter periods, which are poor.

AVERAGE DISCHARGE.--14 years (1966-68, 1972-82), 36.8 ft³/s (1.042 m³/s), 21.36 in/yr (542 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,770 ft³/s (50.1 m³/s) Feb. 11, 1981, gage height, 6.35 ft (1.935 m) from rating curve extended above 190 ft³/s (5.38 m³/s) on basis of slope-area measurement at gage height 5.53 ft (1.686 m), maximum gage height, 7.14 ft (2.716 m) Feb. 11, 1981 (ice jam), minimum discharge recorded, 0.28 ft³/s (0.008 m³/s) Sept. 27, 28, 29, 1968, gage height, 0.18 ft (0.055 m) present datum.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Mar. 26	1400	546	15.5	3.95	1.204	Apr. 3	2300	452	12.8	3.67	1.119
Mar. 31	2355	564	16.0	4.00	1.219	Arp. 18	0200	*955	27.0	*4.93	1.503

Minimum discharge, 0.38 ft³/s (0.011 m³/s) Sept. 12, 13, 14, 15; minimum gage height, 0.72 ft (0.219 m) Aug. 18, 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	64	25	15	14	13	343	40	9.0	26	2.1	.74
2	40	56	30	16	16	11	176	36	17	17	2.0	.91
3	71	50	31	20	25	11	188	34	13	13	1.7	.82
4	55	44	29	40	150	13	254	30	10	12	1.4	.66
5	42	39	26	150	130	12	133	27	11	12	1.6	.66
6	41	55	25	130	80	11	95	26	27	9.3	1.4	.66
7	58	59	23	80	51	11	85	25	34	8.0	1.2	.66
8	48	50	22	66	38	11	80	22	22	8.0	1.3	.58
9	39	45	22	47	31	11	64	23	16	6.6	1.7	.58
10	34	40	20	50	29	11	56	21	12	5.8	1.6	.58
11	29	37	20	40	29	13	57	19	10	5.0	1.1	.74
12	26	34	19	32	25	17	63	17	9.0	5.5	.91	.45
13	24	31	18	28	24	29	68	16	9.0	5.0	.91	.45
14	23	29	18	24	22	50	95	15	12	4.3	.91	.51
15	21	29	17	21	21	41	123	14	9.7	3.9	1.0	1.0
16	19	28	18	19	20	38	173	13	9.0	3.9	.82	1.1
17	18	31	18	18	19	37	321	13	12	3.3	.74	.82
18	23	33	17	17	18	37	485	11	11	3.1	.66	.82
19	30	33	16	16	15	51	180	15	9.7	2.9	.58	.74
20	23	42	16	15	14	58	149	20	19	2.6	.82	.66
21	21	59	17	15	14	63	149	15	12	2.1	.74	.66
22	19	52	18	14	14	68	105	12	11	1.8	.58	.74
23	35	43	19	14	13	73	79	11	13	1.8	.66	1.1
24	77	37	19	13	13	86	69	24	11	1.7	.74	1.4
25	52	34	17	13	13	121	63	21	9.0	1.7	.82	1.2
26	60	31	16	12	14	332	59	17	9.7	1.7	.91	1.2
27	250	30	15	12	12	171	82	14	9.0	1.4	.74	1.7
28	221	31	15	12	12	136	58	12	8.0	2.6	.74	1.8
29	141	29	15	12	---	93	50	10	35	2.8	.74	1.4
30	100	28	16	12	---	83	45	10	56	2.1	.66	1.3
31	77	---	15	13	---	180	---	9.7	---	2.1	.74	---
TOTAL	1752	1203	612	986	876	1892	3947	592.7	455.1	179.0	32.52	26.64
MEAN	56.5	40.1	19.7	31.8	31.3	61.0	132	19.1	15.2	5.77	1.05	.89
MAX	250	64	31	150	150	332	485	40	56	26	2.1	1.8
MIN	18	28	15	12	12	11	45	9.7	8.0	1.4	.58	.45
CFSM	2.42	1.71	.84	1.36	1.34	2.61	5.64	.82	.65	.25	.05	.04
IN.	2.79	1.91	.97	1.57	1.39	3.01	6.27	.94	.72	.28	.05	.04

CAL YR 1981 TOTAL 13293.80 MEAN 36.4 MAX 1170 MIN 1.1 CFSM 1.56 IN 21.13
WTR YR 1982 TOTAL 12553.96 MEAN 34.4 MAX 485 MIN .45 CFSM 1.47 IN 19.96

04280000 POULTNEY RIVER BELOW FAIR HAVEN, VT

LOCATION.--Lat 43°37'40", long 73°18'50", Rutland County, Hydrologic Unit 02010001, on right bank 0.3 mi (0.5 km) downstream from Carver Falls, 1.9 mi (3.1 km) upstream from Hubbardton River, and 3.2 mi (5.1 km) northwest of Fair Haven.

DRAINAGE AREA.--187 mi^2 (484 km^2).

PERIOD OF RECORD.--Discharge: October 1928 to current year.
Water-quality records: Water year 1954.

REVISED RECORDS.--WSP 1114: 1929(M), 1932-35.

GAGE.--Water-stage recorder. Altitude of gage is 105 ft (32 m), from topographic map.

REMARKS.--Records fair except those for winter period, and period of no gage-height record Oct. 17 to Jan. 7, July 22 to Sept. 9 which are poor. Flow regulated by powerplant upstream and by Lake Bomoseen. Several observations of water temperature and specific conductance were made during the year.

AVERAGE DISCHARGE.--54 years, 251 ft^3/s (7.108 m^3/s), 18.23 in/yr (463 mm/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft^3/s (419 m^3/s) July 20, 1945, gage height, 24.36 ft (7.425 m), from high-water mark in well, from rating curve extended above 2,600 ft^3/s (74 m^3/s) on basis of computations of flow over dam at gage heights 16.10 ft (4.907 m), 21.40 ft (6.523 m), and 24.36 ft (7.425 m); minimum daily, 2.1 ft^3/s (0.059 m^3/s) Aug. 8, 1965, Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,600 ft^3/s (74 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Mar. 27	0245	3030	85.8	12.26	3.737
Apr. 1	1230	3780	107	13.57	4.136
Apr. 4	1015	*3810	108	13.63	4.154

Minimum daily discharge, 4.0 ft^3/s (0.113 m^3/s) Sept. 18-20, 22, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588	570	300	250	185	180	3220	223	83	269	4.5	21
2	510	510	270	240	180	185	2160	202	117	251	41	4.2
3	758	460	465	230	165	175	1640	180	178	161	4.7	27
4	1100	430	460	230	240	170	3050	168	110	78	4.5	4.2
5	836	400	390	290	380	180	1760	157	98	55	4.5	4.2
6	855	375	350	640	1080	170	1350	155	223	48	27	4.2
7	876	510	320	560	960	180	993	136	371	44	4.5	21
8	788	680	310	530	720	180	933	124	226	45	4.4	15
9	725	510	310	492	430	170	871	126	139	47	33	4.3
10	637	470	305	448	350	230	881	124	123	47	4.3	24
11	569	430	290	470	275	210	888	107	93	66	22	4.3
12	456	410	280	475	275	185	916	115	93	41	4.3	4.3
13	314	380	270	500	275	290	883	98	86	41	35	4.3
14	338	350	260	450	250	570	914	87	94	42	4.3	4.3
15	221	320	250	350	250	652	862	70	90	41	4.3	4.3
16	231	320	250	325	250	560	857	81	69	36	26	18
17	242	310	265	300	245	527	1050	83	126	36	29	27
18	240	310	250	315	240	496	1610	65	200	29	28	4.0
19	260	360	240	340	240	596	1260	56	115	25	25	4.0
20	710	420	235	290	230	708	1020	87	159	31	35	4.0
21	480	415	230	260	230	816	935	90	161	22	4.3	23
22	400	580	220	245	210	912	871	73	214	8.0	4.3	4.0
23	340	500	215	230	200	1000	692	66	141	5.0	31	4.3
24	350	410	410	210	190	1030	464	110	170	6.8	4.3	30
25	760	360	470	205	185	1230	407	180	150	5.1	4.3	4.0
26	560	330	350	205	180	1840	338	168	131	33	20	4.0
27	540	320	310	205	190	2350	395	96	124	37	28	23
28	1410	340	300	200	180	1330	349	109	91	4.8	4.3	4.9
29	1400	360	285	198	---	1130	293	69	150	4.7	4.3	10
30	900	320	275	195	---	1110	251	104	214	32	4.2	23
31	680	---	260	190	---	1430	---	63	---	4.5	4.2	---
TOTAL	19074	12460	9395	10068	8785	20792	32113	3572	4339	1595.9	458.5	337.8
MEAN	615	415	303	325	314	671	1070	115	145	51.5	14.8	11.3
MAX	1410	680	470	640	1080	2350	3220	223	371	269	41	30
MIN	221	310	215	190	165	170	251	56	69	4.5	4.2	4.0
CFSM	3.29	2.22	1.62	1.74	1.68	3.59	5.72	.62	.78	.28	.08	.06
IN.	3.79	2.48	1.87	2.00	1.75	4.14	6.39	.71	.86	.32	.09	.07

CAL YR 1981 TOTAL 121254.0 MEAN 332 MAX 2690 MIN 20 CFSM 1.78 IN 24.12
WTR YR 1982 TOTAL 122990.2 MEAN 337 MAX 3220 MIN 4.0 CFSM 1.80 IN 24.47

ST. LAWRENCE RIVER BASIN

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT

LOCATION.--Lat 44°28'52", long 73°13'27", Chittenden County, Hydrologic Unit 02010003, 50 ft (15 m) south of Gulf Oil Co. dock at Burlington, 0.1 mi (0.2 km) north of Burlington Water Department pumping station, and 0.5 mi (0.8 km) north of railroad station.

PERIOD OF RECORD.--Gage heights: May 1907 to current year.
Water-quality records: Water year 1971.

REVISED RECORDS.--WSP 684: 1912-29 (datum correction). WSP 1207: 1938 (datum correction).

GAGE.--Water-stage recorder. Datum of gage is 92.86 ft (28.304 m) National Geodetic Vertical Datum of 1929. Prior to July 20, 1937, nonrecording gage at site 0.7 mi (1.1 km) south, and July 20, 1937, to Sept. 7, 1939, nonrecording gage at site 0.1 mi (0.2 km) south, both at present datum.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 8.80 ft (2.682 m) Apr. 4, 1976; minimum observed, -0.25 ft (-0.076 m) Dec. 4, 1908.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 7.39 ft (2.252 m) Apr. 28, affected by seiche; minimum, 1.64 ft (0.500 m) Sept. 26, affected by seiche.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.95	5.37	4.67	3.34	3.10	2.78	4.92	7.25	4.44	3.65	2.56	2.03
2	3.97	5.39	4.60	3.36	3.07	2.75	5.26	7.16	4.44	3.64	2.57	2.04
3	4.00	5.39	4.60	3.32	3.07	2.73	5.41	7.09	4.42	3.65	2.55	2.04
4	4.05	5.36	4.56	3.30	3.10	2.70	5.65	7.03	4.36	3.62	2.53	2.02
5	4.10	5.31	4.54	3.39	3.11	2.67	5.81	6.94	4.31	3.60	2.48	2.00
6	4.10	5.29	4.52	3.44	3.15	2.65	5.87	6.82	4.29	3.55	2.46	2.00
7	4.12	5.32	4.46	3.53	3.15	2.66	5.89	6.75	4.27	3.51	2.43	1.99
8	4.19	5.32	4.42	3.56	3.16	2.65	5.84	6.61	4.24	3.48	2.39	1.99
9	4.23	5.30	4.37	3.57	3.18	2.62	5.79	6.56	4.20	3.41	2.40	1.94
10	4.26	5.28	4.30	3.56	3.18	2.59	5.76	6.52	4.15	3.40	2.39	1.90
11	4.27	5.23	4.26	3.52	3.16	2.55	5.72	6.44	4.07	3.34	2.38	1.90
12	4.25	5.19	4.21	3.54	3.16	2.56	5.71	6.35	4.01	3.24	2.37	1.88
13	4.22	5.11	4.14	3.53	3.15	2.54	5.63	6.25	3.89	3.20	2.35	1.86
14	4.19	5.06	4.07	3.52	3.12	2.60	5.65	6.14	3.82	3.17	2.33	1.83
15	4.13	5.01	4.03	3.50	3.09	2.69	5.67	6.04	3.78	3.14	2.30	1.88
16	4.11	4.95	4.03	3.45	3.09	2.77	5.64	5.92	3.73	3.09	2.26	1.88
17	4.08	4.91	3.97	3.45	3.07	2.84	5.68	5.82	3.71	3.05	2.24	1.85
18	3.92	4.89	3.93	3.43	3.05	2.89	6.07	5.70	3.65	3.02	2.23	1.80
19	3.95	4.89	3.87	3.41	3.01	2.95	6.62	5.59	3.62	2.98	2.19	1.78
20	3.90	4.90	3.81	3.37	3.02	3.03	6.97	5.54	3.59	2.94	2.14	1.76
21	3.88	4.96	3.70	3.34	3.00	3.13	7.08	5.49	3.56	2.90	2.12	1.75
22	3.92	5.01	3.65	3.32	2.98	3.24	7.20	5.39	3.54	2.87	2.10	1.73
23	3.91	5.03	3.67	3.27	2.94	3.36	7.25	5.28	3.56	2.81	2.02	1.72
24	3.97	5.01	3.63	3.29	2.92	3.49	7.28	5.17	3.60	2.75	2.02	1.71
25	4.01	4.98	3.59	3.25	2.89	3.62	7.25	5.10	3.61	2.69	2.09	1.70
26	4.04	4.93	3.58	3.22	2.87	3.88	7.26	5.01	3.63	2.65	2.14	1.68
27	4.21	4.81	3.55	3.19	2.85	4.22	7.31	4.92	3.60	2.61	2.15	1.71
28	4.65	4.82	3.52	3.13	2.83	4.43	7.37	4.83	3.59	2.62	2.13	1.72
29	5.07	4.82	3.52	3.11	---	4.50	7.35	4.73	3.58	2.61	2.10	1.72
30	5.29	4.77	3.49	3.07	---	4.58	7.31	4.65	3.62	2.59	2.07	1.70
31	5.36	---	3.40	3.07	---	4.66	---	4.55	---	2.58	2.05	---
MEAN	4.20	5.09	4.02	3.37	3.05	3.14	6.27	5.92	3.90	3.11	2.28	1.85
MAX	5.36	5.39	4.67	3.57	3.18	4.66	7.37	7.25	4.44	3.65	2.57	2.04
MIN	3.88	4.77	3.40	3.07	2.83	2.54	4.92	4.55	3.54	2.58	2.02	1.68

CAL YR 1981 TOTAL 1371.01 MEAN 3.76 MAX 6.15 MIN 1.95
WTR YR 1982 TOTAL 1405.87 MEAN 3.85 MAX 7.37 MIN 1.68

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY
(National stream-quality accounting network station)
(National pesticide network station)

LOCATION.--Lat 44°59'46", long 73°21'37", Clinton County, Hydrologic Unit 02010006, on left bank at outlet of Lake Champlain in Rouses Point, and 1.0 mi (1.6 km) south of Fort Montgomery ruins. Water-quality sampling site at stage station.

DRAINAGE AREA.--8,277 mi² (21,437 km²).

WATER-STAGE RECORDS

PERIOD OF RECORD.--March 1871 to current year. Maximum and minimum monthly gage heights at St. Johns, Quebec, October 1863 to December 1870, published in WSP 97. Prior to October 1970, daily gage heights published in WSP 894. Discharge records for January 1875 to September 1916 at "Chambly, Quebec," published in WSP 65, 82, 97, 129, 170, 206, 424, and 1307 have been found to be unreliable and should not be used. Daily discharge record for "Richelieu River at Fryers Rapids, Quebec," published in Water Supply of Canada annual reports. Gage heights prior to October 1, 1925, published as "Richelieu River at Fort Montgomery, Rouses Point."

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. March 1871 to May 1923, nonrecording gage located in Fort Montgomery and May 1923 to October 1938, nonrecording gage at present site. Prior to October 1970, at datum 93.00 ft (28.346 m) higher.

REMARKS.--Area of lake surface about 490 mi² (1,269 km²). Total volume below 92.5 ft (28.19 m) elevation, reported by Lake Champlain Studies Center, 902.2 bil ft³ (25,600 hm³).

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 101.80 ft (31.029 m) Mar. 30, 1903; minimum observed, 92.17 ft (28.093 m) Oct. 23, 1941.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation known since at least 1827, 102.1 ft (31.12 m) May 4, 1869, from marks at railroad bridge near present gage, according to data published on p. 428 of the Report of the Board of Engineers on Deep Waterways, 1900: U.S. 56th Cong., 2d sess. H. Doc. 149.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 100.36 ft (30.590 m) Apr. 26, minimum, 94.41 ft (28.776 m) Aug. 25 and Sept. 15.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96.81	98.27	97.74	96.39	95.94	95.64	97.83	100.04	97.43	96.46	95.46	94.93
2	96.77	98.21	97.56	96.14	95.93	95.61	98.09	100.01	97.28	96.54	95.34	94.95
3	96.79	98.20	97.44	96.19	95.91	95.55	98.37	99.90	97.23	96.44	95.32	94.97
4	96.89	98.17	97.43	96.21	95.90	95.55	98.52	99.81	97.22	96.45	95.30	94.88
5	96.95	98.22	97.30	96.22	95.94	95.53	98.61	99.75	97.15	96.45	95.31	94.93
6	97.02	98.17	97.07	96.36	95.98	95.49	98.54	99.65	97.10	96.49	95.29	94.82
7	96.99	98.09	97.26	96.32	96.01	95.47	98.51	99.57	97.08	96.50	95.30	94.79
8	96.94	98.21	97.19	96.36	96.01	95.49	98.59	99.46	97.06	96.37	95.29	94.82
9	97.01	98.09	97.09	96.36	96.00	95.47	98.60	99.33	97.03	96.30	95.41	94.86
10	97.05	98.15	97.09	96.42	96.01	95.44	98.59	99.27	96.99	96.22	95.32	94.82
11	97.05	98.06	97.05	96.44	96.02	95.43	98.55	99.24	97.01	96.29	95.24	94.78
12	97.06	97.98	96.99	96.36	95.99	95.39	98.54	99.16	96.91	96.31	95.19	94.74
13	97.05	97.98	97.00	96.35	95.97	95.43	98.69	99.02	97.02	96.07	95.18	94.74
14	97.07	97.88	96.99	96.31	95.96	95.46	98.43	98.93	96.79	96.04	95.21	94.79
15	97.07	97.76	96.85	96.32	95.96	95.54	98.53	98.83	96.70	96.00	95.19	94.61
16	96.91	97.72	96.74	96.33	95.90	95.62	98.63	98.76	96.65	95.97	95.19	94.70
17	96.92	97.70	96.79	96.25	95.88	95.68	98.74	98.60	96.53	95.96	95.10	94.65
18	97.15	97.66	96.71	96.27	95.88	95.73	99.22	98.54	96.52	95.94	95.08	94.75
19	96.81	97.71	96.68	96.24	95.88	95.79	99.66	98.48	96.48	95.86	95.15	94.63
20	97.03	97.74	96.64	96.20	95.84	95.87	99.82	98.39	96.47	95.73	95.05	94.66
21	96.68	97.78	96.81	96.17	95.81	96.00	99.93	98.28	96.47	95.68	94.93	94.61
22	96.73	97.83	96.65	96.14	95.79	96.11	100.01	98.21	96.42	95.65	94.95	94.56
23	96.71	97.84	96.50	96.19	95.78	96.22	100.13	98.18	96.41	95.59	95.04	94.57
24	96.81	97.83	96.51	96.13	95.74	96.37	100.08	98.05	96.44	95.58	94.93	94.59
25	96.99	97.74	96.46	96.06	95.73	96.50	100.12	97.94	96.52	95.63	94.85	94.56
26	96.97	97.74	96.39	96.04	95.71	96.78	100.18	97.86	96.46	95.47	94.97	94.55
27	97.09	97.88	96.36	96.03	95.69	97.09	100.06	97.77	96.46	95.46	95.04	94.57
28	97.44	97.62	96.40	96.02	95.64	97.28	100.09	97.70	96.43	95.45	94.97	94.55
29	97.96	97.55	96.31	95.95	---	97.38	100.16	97.60	96.40	95.43	94.94	94.55
30	98.19	97.56	96.30	95.93	---	97.44	100.08	97.50	96.42	95.46	95.00	94.61
31	98.32	---	96.34	95.87	---	97.59	---	97.44	---	95.47	94.91	---
MEAN	97.07	97.91	96.86	96.21	95.89	96.00	99.13	98.75	96.77	95.98	95.14	94.72
MAX	98.32	98.27	97.74	96.44	96.02	97.59	100.18	100.04	97.43	96.54	95.46	94.97
MIN	96.68	97.55	96.30	95.87	95.64	95.39	97.83	97.44	96.40	95.43	94.85	94.55

CAL YR 1981 MEAN 96.61 MAX 98.99 MIN 94.86
WTR YR 1982 MEAN 96.70 MAX 100.18 MIN 94.55

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966-67, 1969-72, 1974 to current year.
CHEMICAL DATA: 1966-67 (a), 1969 (b), 1970 (c), 1971-72 (b), 1974-82 (c).
MINOR ELEMENTS DATA: 1974-82 (b).
PESTICIDE DATA: 1976-79 (b), 1980 (a), 1982 (b).
ORGANIC DATA: OC--1974 (a), 1975-77 (b), 1978 (a), 1979-81 (c).
PCB--1978-79 (b), 1980 (a), 1982 (b).
NUTRIENT DATA: 1970 (c), 1971-72 (b), 1974 (b), 1975-82 (c).
BIOLOGICAL DATA:
Bacteria--1974 (a), 1975-82 (c).
Phytoplankton--1974 (a), 1975-78 (c), 1979 (b), 1980-81 (c).
Periphyton--1975 (c), 1976-80 (b).
SEDIMENT DATA: 1975-82 (c).

WATER QUALITY DATA, WATER YEAR, OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (FTU)	BAROMETRIC PRESSURE (MM OF HG)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS NONCARBONATE (MG/L AS CACO3)
OCT 08...	0930	160	6.7	10.5	.60	755	10.7	95	20	K12	56	10
NOV 03...	1000	143	7.3	9.0	1.1	770	11.2	96	40	K16	52	8.0
APR 26...	1000	128	7.3	5.5	1.0	760	13.5	107	<1	62	59	12
MAY 26...	1300	136	8.3	12.5	1.0	760	13.0	123	K2	<1	55	12
JUL 07...	1000	130	7.8	19.0	1.1	765	9.7	104	<1	K1	56	12
AUG 11...	1115	134	8.0	22.0	1.0	760	8.9	102	K7	K3	59	13

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT 08...	16	4.0	5.7	1.1	46	12	8.2	<.1	.8	79	75	.15
NOV 03...	15	3.6	4.9	1.0	44	14	8.1	.1	.7	81	74	.21
APR 26...	17	4.0	6.1	1.2	47	14	8.9	<.1	1.5	92	81	.21
MAY 26...	16	3.6	5.8	1.0	43	15	8.4	.1	.8	90	77	.16
JUL 07...	16	4.0	5.4	1.0	44	13	8.0	.1	.3	93	74	<.10
AUG 11...	17	4.1	6.4	.8	46	12	8.2	<.1	.8	92	77	<.10

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
OCT 08...	<.010	.41	.180	<.010	<.010	1	1	--	20	--	<1
NOV 03...	.020	.56	<.010	<.010	<.010	--	--	--	--	--	--
APR 26...	.020	.21	.020	<.010	<.010	2	1	<100	11	1	1
MAY 26...	.040	.30	.110	.010	<.010	--	--	--	--	--	--
JUL 07...	.070	.30	.010	<.010	<.010	1	<1	<100	10	<1	<1
AUG 11...	.010	.40	.020	.020	.030	1	1	100	11	2	<1

K Results based on colony count outside the acceptable range (non-ideal colony count).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

WATER QUALITY DATA, WATER YEAR, OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)
OCT 08...	--	10	--	<1	--	1	--	12	--	<1	--
NOV 03...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	20	10	<1	<1	5	3	80	18	5	1	10
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	10	10	<1	2	9	3	190	20	<1	2	10
AUG 11...	10	10	5	<1	6	5	90	8	3	1	30

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 08...	2	.1	<.1	--	2	<1	<1	1	1	--	14
NOV 03...	--	--	--	--	--	--	--	--	--	--	--
APR 26...	<3	<.1	<.1	2	2	<1	<1	<1	<1	20	5
MAY 26...	--	--	--	--	--	--	--	--	--	--	--
JUL 07...	4	.1	<.1	4	2	<1	<1	<1	<1	30	8
AUG 11...	2	.9	<.1	6	6	<1	<1	<1	<1	10	5

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SAMPLING DEPTH (FEET)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)
MAY								
26...	1230	275	1.00	13.0	137	8.0	12.5	12.8
26...	1232	275	5.00	13.0	137	8.3	12.5	12.7
26...	1234	275	10.0	13.0	136	8.4	12.5	12.5
26...	1236	275	13.0	13.0	136	8.5	12.5	12.6
26...	1240	550	1.00	17.5	137	8.2	12.5	12.8
26...	1242	550	5.00	17.5	137	8.3	12.5	12.4
26...	1244	550	10.0	17.5	137	8.5	12.5	12.4
26...	1246	550	15.0	17.5	137	8.5	12.5	12.4
26...	1248	550	17.5	17.5	136	8.5	12.5	12.3
26...	1302	825	1.00	27.0	135	8.2	12.5	13.5
26...	1304	825	5.00	27.0	135	8.3	12.5	13.0
26...	1306	825	10.0	27.0	134	8.4	12.5	12.6
26...	1308	825	15.0	27.0	134	8.5	11.5	12.5
26...	1310	825	20.0	27.0	135	8.5	11.5	12.5
26...	1312	825	25.0	27.0	134	8.5	11.5	12.4
26...	1320	1100	1.00	16.0	137	8.2	12.5	13.4
26...	1322	1100	5.00	16.0	136	8.4	12.0	12.7
26...	1324	1100	10.0	16.0	136	8.5	12.0	12.5
26...	1326	1100	15.0	16.0	136	8.5	12.0	12.6
26...	1330	1380	1.00	15.5	135	8.2	13.0	12.6
26...	1332	1380	5.00	15.5	136	8.3	13.0	12.7
26...	1334	1380	10.0	15.5	136	8.4	13.0	12.5
26...	1338	1380	15.0	15.5	136	8.5	13.0	12.3

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)
APR 26...	1000	<.10	<.10	<.01	<.10	<.01	.02	<.01	.01	.02
MAY 26...	1300	<.10	<.10	<.01	<.10	<.01	<.01	<.01	<.01	<.01

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)
APR 26...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
MAY 26...	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR 26...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01
MAY 26...	<.01	<.01	<.10	<1	<.01	<.01	<.01	<.01	<.01

DATE	TIME	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 03...	1000	7	<1.0	<.1	<1.0	<.1	1.7	<.1	<.1

DATE	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
NOV 03...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.10	<1.0

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SEDI-MENT, SUS-PENDED (MG/L)	DATE	TIME	SEDI-MENT, SUS-PENDED (MG/L)
OCT 08...	0930	0	MAY 26...	1300	1
NOV 03...	1000	1	JUL 07...	1000	0
APR 26...	1000	3	AUG 11...	1115	2

LAKES AND RESERVOIRS IN STREAMS TRIBUTARY TO ST. LAWRENCE RIVER

04260990 CRANBERRY LAKE AT CRANBERRY LAKE, NY--Lat 44°13'14", long 74°50'55", St. Lawrence County, Hydrologic Unit 04150302, on right wall at outlet structure, at village of Cranberry Lake. DRAINAGE AREA, 144 mi² (373 km²). PERIOD OF RECORD, April 1923 to current year. GAGE, nonrecording gage read daily at 1200 hours. Datum of gage is 1,469.75 ft (447.980 m) National Geodetic Vertical Datum of 1929.

Dam completed in 1867 and controlled storage for which records are available began in 1923. Usable capacity above elevation 1,475.25 ft (449.656 m) is 2,530 mil ft³ (71.6 hm³). Crest at spillway is at elevation, 1,486.43 ft (453.064 m). Length of spillway is 110 ft (34 m). Area of water surface at crest elevation is 10.9 mi² (28.2 km²). Records furnished by Oswegatchie River-Cranberry Reservoir Commission.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,985 mil ft³ (84.5 hm³) May 13-15, 1971, gage height, 18.5 ft (5.64 m); minimum observed, 70 mil ft³ (1.98 hm³) Apr. 1-4, 1956, gage height, 6.0 ft (1.83 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 2,352 mil ft³ (66.6 hm³) June 7-9, gage height, 16.4 ft (5.00 m); minimum observed, 1,098 mil ft³ (31.1 hm³) Mar. 11-16, gage height, 11.4 ft (3.47 m).

04266700 CARRY FALLS RESERVOIR NEAR SOUTH COLTON, NY--Lat 44°26'07", long 74°44'50", St. Lawrence County, Hydrologic Unit 04150305, near center of upstream wall of dam between Carry Falls and Stark Falls Reservoirs, 2.0 mi (3.2 km) southeast of Stark, and 8.8 mi (14.2 km) southeast of South Colton. DRAINAGE AREA, 873 mi² (2,261 km²). PERIOD OF RECORD, October 1954 to current year. GAGE, nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929.

Dam completed January 1953 and controlled storage for which records are available began in October 1954. Usable capacity above elevation 1,332.0 ft (405.99 m) is 5,114.9 mil ft³ (145 hm³). Crest at spillway is at elevation 1,386.0 ft (422.45 m). Length of spillway is 830 ft (253 m). Area of water surface at crest elevation is 5.16 mi² or 13.4 km² (3,300 acres or 1,300 hm²). The pond has a length of 6 mi (10 km) and a perimeter of 25 mi (40 km). Below crest elevation, capacity controlled by a taintor gate, 27 ft x 15 ft (8m x 5m), and 2 sluice gates, 10 ft x 10 ft (3m x 3m). Records furnished by Niagara Mohawk Power Corp.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 5,146 mil ft³ (146 hm³) June 1, 5, 6, 1955, elevation, 1,386.1 ft (422.48 m); minimum observed, 8.64 mil ft³ (0.245 hm³) Mar. 27-30, 1963, Apr. 4-11, 1964, elevation, 1,331.0 ft (405.69 m).

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 5,091 mil ft³ (144 hm³) May 6, elevation, 1,385.7 ft (422.36 m), minimum observed, 351 mil ft³ (9.94 hm³) Mar. 24, elevation, 1,339.8 ft (408.37 m).

04273900 LAKE PLACID AT LAKE PLACID, NY (see station for daily mean elevations).

04278000 LAKE GEORGE AT ROGERS ROCK, NY (see station for daily mean gage heights).

04294500 LAKE CHAMPLAIN AT BURLINGTON, VT (see station for daily mean gage heights).

04295000 RICHELIEU RIVER (LAKE CHAMPLAIN) AT ROUSES POINT, NY (see station for daily mean elevations).

MONTHEND GAGE HEIGHT, ELEVATION, AND CONTENTS, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

Date	•Gage height (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)	•Elevation (feet)	Contents (million ft³)	Change in contents (equivalent in ft³/s)
	04260990 Cranberry Lake			04266700 Carry Falls Reservoir		
Sept.30	15.9	2,212		1,384.2	4,883.3	
Oct. 31	16.0	2,240	+ 10.4	1,376.8	3,888.0	-371
Nov. 30	14.4	1,814	-164	1,377.4	3,965.8	+ 30.0
Dec. 31	13.9	1,684	- 48.5	1,373.8	3,500.9	-174
CAL YR 1981			+ 3.30			- 1.59
Jan. 31	13.4	1,556	- 47.8	1,363.3	2,329.3	-437
Feb. 28	12.0	1,230	-135	1,348.7	978.9	-558
Mar. 31	12.1	1,252	+ 8.23	1,344.0	630.7	-130
Apr. 30	15.9	2,212	+370	1,382.2	4,606.8	+1534
May 31	16.0	2,240	+ 10.4	1,382.3	4,620.7	+ 5.19
June 30	16.0	2,240	0	1,383.7	4,814.2	+ 74.6
July 31	15.4	2,074	- 62.0	1,368.7	2,903.9	-713
Aug. 31	15.2	2,022	- 19.4	1,363.2	2,319.0	-218
Sept.30	15.0	1,970	- 20.1	1,360.9	2,080.5	- 92.0
WTR YR 1982			- 7.67			- 88.9

• Gage heights or elevations at 2400 hours, by interpolation.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1982

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Measurements	
						Date	Discharge (ft^3/s)
		Hudson River Basin					
01356160	Lisha Kill at Maywood, NY	Lat 42°45'09", long 73°52'23", Albany County, Hydrologic Unit 02020004, at downstream side of culvert on Central Avenue, 1.6 mi (2.6 km) upstream from Albany-Schenectady County line, and 0.8 mi (1.3 km) northwest of Maywood.	9.64	--	1979-80, 1982	3-10-82 7-27-82	2.62 .63
01356280	Shakers Creek near Colonie, NY	Lat 42°44'08", long 73°48'50", Albany County, Hydrologic Unit 02020004, just upstream of pond at Ann Lee Home, 1.8 mi (2.9 km) north of Colonie Central High School, and 1.6 mi (2.6 km) northeast of Colonie.	2.76	--	1979-80, 1982	7-27-82	0.00
01356285	Shakers Creek tributary near Colonie, NY	Lat 42°44'13", long 73°48'35", Albany County, Hydrologic Unit 02020004, just upstream of pond at Ann Lee Home, 2.0 mi (3.2 km) north of Colonie Central High School, and 1.6 mi (2.6 km) northeast of Colonie.	.61	--	1979-80, 1982	3-10-82 7-27-82	0.90 .00
01359131	Patroon Creek at Central Avenue, Albany, NY	Lat 42°41'15", long 73°47'56", Albany County, Hydrologic Unit 02020006, at downstream side of culvert on Central Avenue just south of New York Central overcrossing at Roessleville, at Albany.	7.37	--	1979-80, 1982	3-10-82 7-26-82	7.51 5.92
01359132	Sand Creek at Sand Creek Road, at Albany, NY	Lat 42°41'13", long 73°46'47", Albany County, Hydrologic Unit 02020006, at upstream side of culvert on Sand Creek Road, 0.4 mi (0.6 km) upstream of New York Central Railroad, at Albany.	2.79	--	1979-80, 1982	3-10-82 7-26-82	2.12 1.55
01359513	Hunger Kill at Guilderland, NY	Lat 42°41'22", long 73°54'26", Albany County, Hydrologic Unit 02020006, on left bank, 100 ft (30 m) downstream from bridge on Nott Road, and 1.0 mi (1.6 km) south of Guilderland.	8.16	--	1968-77*, 1962-65, 1982	7-26-82	7.42

* Operated as a continuous-record gaging station.

Discharge measurements made at low-flow partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Miles above mouth	Period of record	Measurements	
						Date	Discharge (ft^3/s)
		Hudson River Basin--Continued					
01359516	South Branch Blockhouse Creek at Westmere, NY	Lat 42°41'07", long 73°53'52", Albany County, Hydrologic Unit 02020006, at junction of South Branch with Blockhouse Creek, 0.2 mi (0.3 km) east of State Highway 155, and 1.0 mi (1.6 km) southwest of Westmere.	--	--	1967, 1979-80, 1982	3-10-82 7-26-82	0.77 .97
01359517	Blockhouse Creek near Guilderland, NY	Lat 42°41'08", long 73°54'05", Albany County, Hydrologic Unit 02020006, at bridge on State Highway 155, 0.2 mi (0.3 km) upstream from Kaikout Kill, and 1.4 mi (2.2 km) south of Guilderland.	1.96	0.4	1962-67, 1970, 1973-75, 1979, 1982	3-10-82 7-26-82	1.14 .95
01359523	Krum Kill tributary at Albany, NY	Lat 42°40'36", long 73°50'10", Albany County, Hydrologic Unit 02020006, at bridge on McKowan Road, 0.45 mi (0.72 km) downstream from U.S. Highway 20 (Western Avenue), at Albany.	1.43	0.5	1962, 1979-80, 1982	3-10-82 7-27-82	0.97 1.08

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1982

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Housatonic River basin					
01199477	Stony Brook near Dover Plains, NY	Lat 41°42'38", long 73°37'18", Dutchess County, Hydrologic Unit 01100005, on town road, 100 ft (30 m) upstream from mouth, and 2.9 mi (4.7 km) southwest of Dover Plains.	1.93	1976-82	6- 7-82	2.14	167
		Hudson River basin					
01319800	West Branch Sacandaga River at Arietta, NY	Lat 43°15'03", long 74°31'06", Hamilton County, Hydrologic Unit 02020002, at bridge on State Highway 10, 0.4 mi (0.6 km) north of Arietta.	28.9	1963-82	4-18-82	13.05	-
01319950	Sand Lake Outlet near Piseco, NY	Lat 43°22'15", long 74°32'47", Hamilton County, Hydrologic Unit 02020002, at bridge on State Highway 10, 0.9 mi (1.4 km) upstream from mouth and 5.5 mi (8.8 km) south of Piseco.	7.16	1962-66, 1968-82	10-28-81	2.30	-
01329154	Steele Brook at Shushan, NY	Lat 43°05'35", long 73°19'38", Washington County, Hydrologic Unit 02020003, at bridge on county road, 1.1 mi (1.8 km) upstream from mouth, and 0.8 mi (1.3 km) east of Shushan.	2.85	1979-82	4- 3-82	3.46	41
01329780	Sessions Brook at Porters Corners, NY	Lat 43°09'21", long 73°52'45", Saratoga County, Hydrologic Unit 02020003, at culvert on County Highway 17, 0.7 mi (1.1 km) northeast of Porters Corners, and 0.9 mi (1.4 km) upstream from mouth.	1.04	1976-82	4-18-82	10.61	28
01329900	Glowegee Creek tributary at Mosherville, NY	Lat 43°03'24", long 74°00'58", Saratoga County, Hydrologic Unit 02020003, at culvert on Parkis Mill Road, 0.4 mi (0.6 km) south of Mosherville.	1.42	1968-75, 1979-82	2- 4-82	12.71	110
01330880	Saratoga Lake tributary near Bemis Heights, NY	Lat 42°59'43", long 73°43'06", Saratoga County, Hydrologic Unit 02020003, at culvert on State Highway 423, 1.4 mi (2.3 km) upstream from mouth, and 4.6 mi (7.4 km) northwest of Bemis Heights.	2.98	1968, 1970-71, 1973, 1975-82	4- 3-82	12.63	96
01333367	Little Hoosic River at Cherry Plain, NY	Lat 42°37'57", long 73°21'23", Rensselaer County, Hydrologic Unit 02020003, at bridge on town road, just upstream from Kronk Brook, in Cherry Plain, 4.2 mi (6.8 km) south of Berlin.	2.22	1976-82	4-18-82	2.11	89

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Hudson River basin--Continued					
01342730	Steele Creek at Ilion, NY	Lat 43°00'05", long 75°02'44", Herkimer County, Hydrologic Unit 02020004, at bridge on Whitney Street in Ilion, and 2.6 mi (4.2 km) upstream from mouth.	26.1	1964-65, 1966-68*, 1969, 1971-74, 1976-82	6-29-82	4.33	1,250
01346820	Mohawk River tributary at Indian Castle, NY	Lat 43°00'34", long 74°47'47", Herkimer County, Hydrologic Unit 02020004, at culvert on State Highway 5S, 0.35 mi (0.6 km) west of Indian Castle, and 0.4 mi (0.7 km) upstream from mouth.	1.40	1974-82	2- 4-82 3-31-82	b2.69 2.27	- 81
01347460	Spruce Lake tributary near Salisbury Center, NY	Lat 43°10'51", long 74°48'44", Herkimer County, Hydrologic Unit 02020004, at culvert on town road (Jerseyfield Road), 1.3 mi (2.1 km) upstream from mouth, and 2.9 mi (4.7 km) north of Salisbury Center.	.53	1978-82	4-18-82	4.53	64
01348420	North Creek near Ephratah, NY	Lat 43°00'28", long 74°33'54", Fulton County, Hydrologic Unit 02020004, at culvert on town road, 0.4 mi (0.7 km) upstream from mouth, and 1.2 mi (1.9 km) northwest of Ephratah.	6.68	1975-82	6-29-82	8.95	540
01349360	Van Wie Creek tributary near Randall, NY	Lat 42°54'11", long 74°25'55", Montgomery County, Hydrologic Unit 02020004, at culvert on Brumley Road, 0.3 mi (0.5 km) south of intersection with Argisinger Road, and 0.9 mi (1.4 km) southwest of Randall.	1.00	1974-82	10-28-81	7.06	132
01349850	Batavia Kill at Hensonville, NY	Lat 42°22'17", long 74°12'55", Greene County, Hydrologic Unit 02020005, on County Highway 40, at Hensonville, 0.7 mi (1.1 km) upstream from Silver Lake Outlet, and 1.8 mi (2.9 km) upstream from Nauvo Stream.	13.5	1955, 1960-66, 1972, 1974, 1976, 1978-82	6- 6-82	3.10	515
01350900	Beaverdam Creek near Knox, NY	Lat 42°38'55", long 74°07'56", Albany County, Hydrologic Unit 02020005, 250 ft (76 m) downstream from bridge, 1.2 mi (1.9 km) south of Knox, and 1.7 mi (2.7 km) upstream from mouth.	6.91	1963-64, 1966-74, 1976-77, 1979-82	2- 5-82 6- 6-82	b4.93 4.77	- 172
01354200	Sandsea Kill at Pattersonville, NY	Lat 42°53'20", long 74°04'42", Schenectady County, Hydrologic Unit 02020004, at bridge on State Highway 5S, in village of Pattersonville.	9.60	1961, 1963-67, 1971-74, 1976-82	10-28-81	4.36	-
01354300	Plotter Kill at Rynex Corners, NY	Lat 42°49'16", long 74°04'20", Schenectady County, Hydrologic Unit 02020004, at bridge on State Highway 159, in hamlet of Rynex Corners.	3.70	1958, 1960-68, 1970-74, 1976-82	10-28-81	5.75	340

b Ice jam.
* Operated as a continuous-record gaging station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
		Hudson River basin--Continued					
01355405	Indian Kill near Glenville Center, NY	Lat 42°53'40", long 73°57'27", Schenectady County, Hydrologic Unit 02020004, 1.1 mi (1.8 km) east of Glenville Center, and 1.3 mi (2.1 km) west of East Glenville.	2.25	1974-82	6- 6-82	17.17	112
01359133	Patroon Creek at Northern Boulevard at Albany, NY	Lat 42°40'17", long 73°45'22", Albany County, Hydrologic Unit 02020006, at culvert, 500 ft (150 m) upstream from Northern Boulevard, 700 ft (210 m) downstream from railroad bridge, 1600 ft (490 m) downstream from Tivoli Lake at Albany, and 1.3 mi (2.1 km) upstream from mouth.	13.1	1979-82	8- 9-82	9.73	450
01361245	Tributary to Taghkanic Creek tributary near Craryville, NY	Lat 42°09'54", long 73°34'15", Columbia County, Hydrologic Unit 02020006, at culvert on County Highway 7, 300 ft (91 m) upstream from mouth, 0.1 mi (0.2 km) northwest of intersection of Routes 7 and 7A, 1.1 mi (1.8 km) upstream from Taghkanic Creek and 1.4 mi (2.3 km) southeast of Craryville.	0.39	1982	4- 8-82	4.10	95
01361453	Catskill Creek tributary at Franklinton, NY	Lat 42°31'35", long 74°18'33", Schoharie County, Hydrologic Unit 02020006, at culvert on town road, 0.15 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) northwest of Franklinton.	3.61	1968-72, 1974-82	3-11-82 4- 3-82	b3.33 3.19	- 80
01361900	Shingle Kill at Cairo, NY	Lat 42°18'22", long 74°00'13", Greene County, Hydrologic Unit 02020006, at bridge on town road at Cairo, southeast of State Highway 32, about 400 ft (122 m) south of State Highway 23, and 0.8 mi (1.3 km) upstream from mouth.	13.9	1953, 1966-74, 1976-82	6- 6-82	6.74	1,290
01362100	Roeliff Jansen Kill near Hillsdale, NY	Lat 42°09'14", long 73°31'14", Columbia County, Hydrologic Unit 02020006, at bridge on county highway off State Highway 22, 1.8 mi (2.9 km) south of Hillsdale.	27.5	1958-60‡, 1963-64, 1968-82	2- 4-82 4-18-82	b3.97 3.92	- 557
01362197	Bushnellsville Creek at Shandaken, NY	Lat 42°07'25", long 74°24'02", Ulster County, Hydrologic Unit 02020006, along State Highway 42, 0.4 mi (0.6 km) upstream from Esopus Creek, and 0.6 mi (1.0 km) northwest of Shandaken.	11.4	1951, 1956, 1972, 1976-82	2- 4-82 4-18-82	b8.06 7.95	- 290
01363388	Dry Brook at West Shokan, NY	Lat 41°58'22", long 74°17'50", Ulster County, Hydrologic Unit 02020006, at bridge on town road, 0.6 mi (1.0 km) northwest of West Shokan, and 1.2 mi (1.9 km) upstream from mouth.	1.67	1978-82	4-18-82	<3.20	<225
01372200	Wappinger Creek near Clinton Corners, NY	Lat 41°48'55", long 73°45'50", Dutchess County, Hydrologic Unit 02020008, on right downstream wingwall of highway bridge 850 ft (259 m) downstream from abandoned bridge abutment of Philadelphia, Reading, and New England Railroad, 1,900 ft (579 m) downstream from East Branch Wappinger Creek, and 1 mi (1.6 km) south of Clinton Corners.	92.4	1956-76‡, 1977-82	2- 3-82 2- 4-82	b10.10 9.20	- 1,390

b Ice jam.
‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Hudson River basin--Continued					
01373690	Woodbury Creek near Highland Mills, NY	Lat 41°22'00", long 74°06'17", Orange County, Hydrologic Unit 02020008, on left bank, 40 ft (12 m) downstream from culvert type bridge on road to Atlantic Coast Aggregate Corp. plant, 1,200 ft (366 m) downstream from bridge on State Highway 32, and 1.9 mi (3.1 km) north of Highland Mills.	11.2	1966-68‡, 1971-72, 1977-82	2- 3-82 6- 7-82	b2.99 2.45	- -
01374130	Canopus Creek at Oscawana Corners, NY	Lat 41°22'43", long 73°52'23", Putnam County, Hydrologic Unit 02030101, at bridge on Hortun Hollow Road, 0.4 mi (0.6 km) downstream from West Branch, and 0.8 mi (1.3 km) west of Oscawana Corners.	8.30	1975-82	1- 4-82	3.62	204
01374250	Peekskill Hollow Creek at Tompkins Corners, NY	Lat 41°23'18", long 73°48'47", Putnam County, Hydrologic Unit 02030101, at bridge on Bryant Pond Road, 0.9 mi (1.4 km) southwest of Tompkins Corners, and 1.1 mi (1.8 km) downstream from Wiccopee Brook.	14.9	1975-82	1- 4-82	2.70	219
01376420	Saw Mill River at Elmsford, NY	Lat 41°03'19", long 73°49'16", Westchester County, Hydrologic Unit 02030101, at bridge on State Highway 119, 0.6 m (1.0 km) upstream from Hum Brook, and 0.8 mi (1.3 km) downstream from Mine Brook at Elmsford.	15.4	1979-82	1- 4-82	8.35	416
		Passaic River basin					
01387410	Torne Brook at Ramapo, NY	Lat 41°08'34", long 74°09'44", Rockland County, Hydrologic Unit 02030103, 0.2 mi (0.3 km) upstream from mouth, and 0.5 mi (0.8 km) east of Ramapo.	2.60	1960, 1962-82	5-29-82	6.50	-
		Delaware River basin					
01417185	Campbell Brook tributary near Downsville, NY	Lat 42°02'41", long 74°58'37", Delaware County, Hydrologic Unit 02040102, at culvert on Campbell Brook Road, 200 ft (61 m) upstream from mouth, 2.0 mi (3.2 km) southwest of Downsville Dam, and 2.7 mi (4.3 km) southeast of Downsville.	.41	1975-82	4- 4-82	<1.96	<11
01437345	Basher Kill tributary near Westbrookville, NY	Lat 41°30'34", long 74°32'36", Sullivan County, Hydrologic Unit 02040104, at culvert on town road, 0.2 mi (0.3 km) upstream from mouth, and 1.0 mi (1.6 km) northeast of Westbrookville.	1.07	1975-82	3-26-82	3.46	79

b Ice jam.
‡ Operated as a continuous-record gaging station.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Streams tributary to Lake Ontario					
042490673	North Branch Grindstone Creek near Altmar, NY	Lat 43°29'31", long 76°05'41", Oswego County, Hydrologic Unit 04140102, at culvert on Hong Kong Road, 4.1 mi (6.6 km) upstream from confluence with South Branch Grindstone Creek, and 4.1 mi (6.6 km) southwest of Altmar.	11.2	1976-82	4- 1-82	10.62	331
04256040	Mill Creek tributary near Lowville, NY	Lat 43°45'43", long 75°31'13", Lewis County, Hydrologic Unit 04150101, at culvert on West Road, 2.0 mi (3.2 km) southwest of Lowville, and 2.2 mi (3.5 km) upstream from mouth.	R1.66	1976-82	4-18-82	11.28	153
04258700	Deer River at Deer River, NY	Lat 43°55'49", long 75°35'27", Lewis County, Hydrologic Unit 04150101, on left bank 350 ft (107 m) upstream from bridge on State Highway 26 at Deer River, and 2 mi (3.2 km) upstream from mouth.	R94.8	1957-69*, 1977-82	4-18-82	6.75	7,920
04260575	Horse Creek tributary near Dexter, NY	Lat 44°04'47", long 76°03'28", Jefferson County, Hydrologic Unit 04150102, at bridge on Weaver Road, 0.3 mi (0.5 km) upstream from mouth, 1.0 mi (1.6 km) southwest of Reynolds Corners, and 5.1 mi (8.2 km) north of Dexter.	4.59	1976-82	3-14-82 4-18-82	b13.20 11.43	- 252
		Streams tributary to St. Lawrence River					
04263445	Birch Creek at Pierces Corners, NY	Lat 44°25'42", long 75°32'15", St. Lawrence County, Hydrologic Unit 04150303, at culvert on Old State Road at Pierces Corners, 4.4 mi (7.1 km) southeast of Pope Mills, and 11.1 mi (17.9 km) upstream from mouth.	1.56	1977-82	4-18-82	3.57	55
04264300	Brandy Brook near Waddington, NY	Lat 44°49'42", long 75°09'32", St. Lawrence County, Hydrologic Unit 04150301, at bridge on Halfway House Road, 3.2 mi (5.1 km) southeast of Waddington, and 4.4 mi (8.2 km) upstream from mouth.	27.0	1959-63*, 1964-69, 1976-82	3-14-82 4-18-82	b7.83 7.17	- 452
04265100	Elm Creek near Hermon, NY	Lat 44°26'15", long 75°12'49", St. Lawrence County, Hydrologic Unit 04150304, on left bank, 100 ft (30 m) downstream from highway bridge, 2.3 mi (3.7 km) south of Hermon, and 6.8 mi (10.9 km) upstream from confluence with Tanner Creek.	R32.6	1958-68*, 1969-82	4-18-82	7.72	841
04267800	Trout Brook at Allen Corners, NY	Lat 44°47'34", long 75°02'01", St. Lawrence County, Hydrologic Unit 04150305, at abandoned bridge off State Highway 56A, at Allen Corners, and 2 mi (3 km) southwest of Norfolk.	R54.2	1958-63* 1964-65, 1967-74, 1976-82	3-14-82 4-18-82	b10.51 9.06	- 1,190

b Ice jam.
* Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Date	Gage height (feet)	Discharge (ft^3/s)
Streams tributary to St. Lawrence River--Continued							
04268200	Plum Brook at Grantville, NY	Lat 44°52'46", long 74°54'54", St. Lawrence County, Hydrologic Unit 04150305, at bridge on Grant Road, 0.7 mi (1.1 km) downstream from unnamed tributary, 1.1 mi (1.8 km) upstream from mouth, 1.4 mi (2.3 km) north of Grantville, and 2.3 mi (3.7 km) southwest of Massena city limits.	R43.9	1958-63‡, 1964, 1966-68, 1971-82	4- 1-82	5.83	890
04268720	Hopkinton Brook at Hopkinton, NY	Lat 44°40'59", long 74°41'58", St. Lawrence County, Hydrologic Unit 04150306, at bridge on town road, 0.4 mi (0.6 km) upstream from unnamed tributary, 0.6 mi (1.0 km) south of Hopkinton, and 2.0 mi (3.2 km) upstream from mouth.	R20.0	1967, 1969, 1973-74, 1976-82	4- 1-82	3.01	530
04268800	West Branch St. Regis River near Parishville, NY	Lat 44°35'55", long 74°44'15", St. Lawrence County, Hydrologic Unit 04150306, at highway bridge, 4.1 mi (6.6 km) downstream from downstream from Mud Pond Outlet, 4.2 mi (6.8 km) southeast of Parishville, and 4.8 mi (7.7 km) upstream from Niagara Mohawk Power Corp. dam.	R171	1959-68‡ 1969, 1971, 1974, 1976-82	4-18-82	5.84	3,910
04269050	Allen Brook near Brasher Falls, NY	Lat 44°48'07", long 74°43'41", St. Lawrence County, Hydrologic Unit 04150306, at bridge on U.S. Highway 11, 0.8 mi (1.3 km) upstream from mouth, and 2.2 mi (3.5 km) east of Brasher Falls.	16.0	1961-66‡, 1967-74, 1976-82	10-28-81 3-14-82	4.73 b5.01	811 -
04269100	Lawrence Brook near Moira, NY	Lat 44°50'20", long 74°35'46", Franklin County, Hydrologic Unit 04150306, at highway bridge, 2.4 mi (3.9 km) northwest of Moira, and 5.4 mi (8.7 km) upstream from mouth.	R25.7	1959-60‡, 1961-82	9-11-81 10-28-81	5.92 6.06	816 934
04270100	West Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'49", long 74°28'51", Franklin County, Hydrologic Unit 04150307, at highway bridge, 0.8 mi (1.3 km) west of Fort Covington Center, 2.1 mi (3.4 km) upstream from East Branch, and 3.1 mi (5.0 km) south of Fort Covington.	R32.4	1962-74, 1976-82	10-28-81	7.06	1,360
04270150	East Branch Deer Creek at Fort Covington Center, NY	Lat 44°56'53", long 74°27'50", Franklin County, Hydrologic Unit 04150307, at highway bridge, at Fort Covington Center, 1.9 mi (3.1 km) upstream from West Branch, and 3.2 mi (5.1 km) south of Fort Covington.	R23.9	1961-62‡, 1963-74, 1976-82	10-28-81	5.54	715

b Ice jam.
‡ Operated as a continuous-record gaging station.
R Revised.

Annual maximum discharge at crest-stage partial-record stations during water year 1982--Continued

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Dis-charge (ft^3/s)
		Streams tributary to St. Lawrence River--Continued					
04270162	East Branch Little Salmon River near Skerry, NY	Lat 44°47'13", long 74°22'12", Franklin County, Hydrologic Unit 04150307, at culvert on Adams Road, 100 ft (30 m) downstream from Limekiln Brook, 1.1 mi (1.8 km) northeast of Skerry, and 5.7 mi (9.0 km) upstream from mouth.	7.11	1978-82	10-28-81	4.06	108
04270700	Trout River at Trout River, NY	Lat 44°59'23", long 74°17'56", Franklin County, Hydrologic Unit 04150307, at bridge on county highway, 0.2 mi (0.3 km) east of State Highway 30, at Trout River, 0.5 mi (0.8 km) upstream from international boundary, 1.5 mi (2.4 km) downstream from unnamed tributary, and 3.3 mi (5.3 km) downstream from Little Trout River.	107	1970-66*, 1967-74, 1976-82	10-28-81	6.59	3,340
04273700	Salmon River at South Plattsburgh, NY	Lat 44°38'24", long 73°29'43", Clinton County, Hydrologic Unit 02010004, on left bank, at bridge on Salmon River Road, at South Plattsburgh, 0.4 mi (0.6 km) west of State Highway 22, and 3.9 mi (6.3 km) upstream from mouth.	61.9	1960-68*, 1969, 1971-82	10-28-81 3-26-82	3.98 b5.77	- -

b Ice jam.
* Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1982

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Hudson River basin				
01311998 Woodruff Pond Outlet	Harris Lake	Lat 43°58'10", long 74°09'51", Essex County, Hydrologic Unit 02020001, at culvert on State Highway 28N, 0.5 mi (0.8 km) downstream from Woodruff Pond, at Newcomb.	3.37		7-16-82 8- 3-82 9-24-82	*0.30 .54 4.07
01316154 Clear Pond Outlet	The Branch	Lat 43°59'44", long 73°49'53", Essex County, Hydrologic Unit 02020001, at culvert on Elk Lake Road, 3.2 mi (5.2 km) northwest of Blue Ridge, and 6.0 mi (9.7 km) northwest of North Hudson.	2.19		7-22-82 8- 3-82 9-24-82	*.74 .66 .42
01347260 Otter Lake Outlet	Green Lake	Lat 43°10'52", long 74°30'13", Fulton County, Hydrologic Unit 02020004, at a site along side a private road, just downstream from pond, and 0.6 mi (1.0 km) northeast of Canada Lake.	1.58		9-20-82	.39
01348985 Otsguago Creek Tributary to Tributary No. 3	Otsguago Creek Tributary	Lat 42°53'18", long 73°40'28", Montgomery County, Hydrologic Unit 02020004, at culvert on State Highway 163, 1.5 mi (2.4 km) southwest of Freybrush, and 1.2 mi (1.9 km) northeast of Hessville.	1.83		10-28-81	p410
01349073 Canajoharie Creek	Mohawk River	Lat 42°50'45", long 74°39'07", Montgomery County, Hydrologic Unit 02020004, at culvert on South Buel Road, 0.4 mi (0.6 km) southeast of Buel, and 1.9 mi (3.1 km) southeast of Sprout Brook.	28.9		10-28-81	p2,590
0136340105 Diversion from Ashokan Reservoir	Croton River	Lat 41°52'09", long 74°10'13", Ulster County, Hydrologic Unit 02020006, in Aqueduct Siphon House of the Catskill Aqueduct, 2.3 mi (3.7 km) northeast of Kripplebush and 2.0 mi (3.2 km) northwest of Stone Ridge.			2- 2-82 6-24-82	839 514
		Delaware River basin				
01421200 Cadosia Creek	East Branch Delaware River	Lat 41°58'03", long 75°15'51", Delaware County, Hydrologic Unit 02040102, at bridge on State Highway 236, 0.3 mi (0.5 km) upstream from mouth, at Cadosia.	R17.9	1949-50, 1955, 1957-71, 1973-81	10-22-81 5- 5-82 6-29-82 7-14-82 8- 6-82 9-30-82	*6.24 *14.1 79.7 *7.62 *3.90 *2.22
01426000 Oquaga Creek	West Branch Delaware River	Lat 42°03'35", long 75°25'40", Broome County, Hydrologic Unit 02040101, on left bank, 200 ft (61 m) upstream from washed-out dam at rear of Delaware Mills, 400 ft (120 m) upstream from Mill Street Bridge in Deposit, and 0.3 mi (0.5 km) upstream from mouth.	R67.6	1941-73‡, 1975-76, 1979-81	10-22-81 5- 5-82 7-14-82 8- 6-82 9-30-82	*10.6 *44.2 *18.6 *8.13 *4.67
01428000 Tenmile River	Delaware River	Lat 41°33'51", long 75°00'56", Sullivan County, Hydrologic Unit 02040101, on left bank 0.5 mi (0.8 km) downstream from East Branch Tenmile River, 0.8 mi (1.3 km) upstream from mouth, and 0.6 mi (1.0 km) northeast of Tusten.	R45.6	1946-73‡, 1978-81	5- 5-82 7-15-82 8-31-82 9-20-82	*57.7 *5.44 *2.64 *1.74
01438000 Neversink River	Delaware River	Lat 41°21'40", long 74°41'07", Orange County, Hydrologic Unit 02040104, at Tristates Bridge on East Main Street (U.S. Highway 6), in Port Jervis, 450 ft (137 m) upstream from Clove Brook, and 0.6 mi (1.0 km) upstream from mouth.	R336	1902-03, 1943, 1945, 1960-62, 1965-81	11- 5-81 1-27-82 5-27-82 7- 8-82 8- 4-82 9-20-82	168 222 290 216 148 94.6

p Peak discharge.
* Base flow.
R Revised.
‡ Operated as a continuous-record gaging station.

Discharge measurements made at miscellaneous sites during water year 1982--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Streams tributary to Lake Ontario				
04253630 Constable Creek	Big Moose Lake	Lat 43°49'30", long 74°50'18", Herkimer County, Hydrologic Unit 04150101, at culvert on town road, 1,000 ft (300 m) east of the south bay of Big Moose Lake, and 3.9 mi (6.3 km) east of Big Moose.	5.34		7-15-82 7-22-82	*1.15 *1.01
04253640 West Pond Outlet	Big Moose Lake	Lat 43°49'02", long 74°52'50", Herkimer County, Hydrologic Unit 04150101, at culvert on Big Moose Road, 1.7 mi (2.7 km) east of Big Moose.	.71		7-16-82 7-22-82 9-24-82	*.04 *.05 1.62
04253650 North Branch Moose River	Middle Branch Moose River	Lat 43°48'59", long 75°51'21", Herkimer County, Hydrologic Unit 04150101, at culvert on town road, just downstream from dam of Big Moose Lake, and 3.0 mi (4.8 km) east of Big Moose.	36.9		7-15-82 7-22-82 9-22-82	18.7 10.6 21.9
04253655 Townsend Pond Outlet	North Branch Moose River	Lat 43°48'30", long 74°51'05", Herkimer County, Hydrologic Unit 04150101, at culvert on Big Moose Road, just upstream from mouth, and 3.3 mi (5.3 km) southeast of Big Moose.	.58		7-15-82 7-22-82 9-24-82	*.04 *.03 .43
04253660 Windfall Pond Outlet	North Branch Moose River	Lat 43°48'13", long 74°50'57", Herkimer County, Hydrologic Unit 04150101, at culvert on Big Moose Road, 0.9 mi (1.4 km) west of Windfall Pond, and 3.4 mi (5.5 km) southeast of Big Moose.	1.54		7-14-82 7-22-82 9-24-82	*.15 *.12 1.89
04253680 North Branch Moose River	Middle Branch Moose River	Lat 43°47'32", long 74°52'31", Herkimer County, Hydrologic Unit 04150101, at trail crossing, 0.4 mi (0.6 km) downstream from Dart Lake, and 2.6 mi (4.2 km) southeast of Big Moose.	41.5		7-21-82 9-24-82	12.1 37.4
04253710 Cascade Lake Outlet	Moss Lake	Lat 43°47'20", long 74°48'52", Hamilton County, Hydrologic Unit 04150101, at culvert on town road, 0.1 mi (0.2 km) downstream from Cascade Lake, and 1.5 mi (2.4 km) north of Eagle Bay.	1.80		7-14-82 7-22-82	*1.86 *1.24
04253715 Moss Lake Tributary	Moss Lake	Lat 43°47'20", long 74°50'41", Herkimer County, Hydrologic Unit 04150101, at culvert on Big Moose Road, 2.0 mi (3.2 km) northwest of Eagle Bay.	.50		7-14-82 7-22-82 9-24-82	*.25 *.23 .38
04253720 Moss Lake Outlet	North Branch Moose River	Lat 43°46'53", long 74°51'11", Herkimer County, Hydrologic Unit 04150101, at trail just downstream from Moss Lake, and 2.1 mi (3.4 km) northwest of Eagle Bay.	4.82		9-22-82	2.05
04253740 Bubb Lake Outlet	Moss Lake Outlet	Lat 43°46'52", long 74°51'11", Herkimer County, Hydrologic Unit 04150101, at mouth just above Moss Lake Outlet, and 1.9 mi (3.1 km) northwest of Eagle Bay.	1.02		7-22-82	*.24
04253780 North Branch Moose River	Middle Branch Moose River	Lat 43°45'38", long 74°54'49", Herkimer County, Hydrologic Unit 04150101, at site just downstream from dam of Lake Randaxe, and 4.8 mi (7.7 km) southeast of Eagle Bay.	54.8		7-21-82 9-23-82	28.4 37.1

* Base flow.

Discharge measurements made at miscellaneous sites during water year 1982--Continued

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		Streams tributary to St. Lawrence River				
04268385 Black Pond Outlet	Lower St. Regis Lake	Lat 44°25'56", long 74°17'53", Franklin County, Hydrologic Unit 04150306, staff gage on right bank, 62 ft (18.9 m) upstream from dam on Black Pond, 70 ft (21.3 m) upstream from Keese Mills Road, and 2.2 mi (3.5 km) west of Paul Smiths.	1.44	1972-73, 1975	7-12-82	*3.97
04272512 Saranac River	Lake Champlain	Lat 44°19'30", long 74°08'00", Franklin County, Hydrologic Unit 02010006, at bridge on State Highway 3 and 365 in Saranac Lake, 300 ft (91 m) downstream of dam on Lake Flower.	187	1966, 1975	4-21-82	p922
04273819 Heart Lake Outlet	MacIntyre Brook	Lat 44°10'48", long 73°58'00", Essex County, Hydrologic Unit 02010004, at trail crossing about 200 ft (61 m) downstream from Heart Lake, and 4.3 mi (6.9 km) southwest of North Elba.	.26		7-13-82	*.04

* Base flow.
p Peak discharge.

Samples are collected at sites other than gaging stations and partial-record stations to give better areal coverage in a river basin. Such sites are referred to as miscellaneous sites.

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)
HUDSON RIVER BASIN											
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982 21...	1550	360	8.3	14.5	1.1	.96	.010	.040	1.1	1.0	.050
AUG 17...	1420	510	8.6	21.5	--	--	--	--	--	--	--
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982 21...	1440	520	8.0	13.5	1.1	1.10	.020	.010	1.1	1.1	.050
AUG 17...	1330	560	8.2	22.0	--	--	--	--	--	--	--
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982 21...	1240	525	8.1	13.5	.89	.85	.010	.010	.90	.86	.030
AUG 17...	1210	585	8.0	22.5	--	--	--	--	--	--	--
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982 21...	1020	595	8.0	13.0	.98	.96	.020	.020	1.0	.98	.110
AUG 17...	1100	580	8.6	23.0	--	--	--	--	--	--	--

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NIRTOGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N	NITROGEN, TOTAL (MG/L AS N)	NITROGEN, DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)										
APR , 1982 21...	.060	1.1	1.1	1.10	1.2	2.2	2.2	.020	.040	<.010
AUG 17...	--	--	--	--	--	--	--	--	--	--
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)										
APR , 1982 21...	.040	1.1	5.1	1.10	5.1	2.2	6.2	.060	.020	.020
AUG 17...	--	--	--	--	--	--	--	--	--	--
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)										
APR , 1982 21...	.030	.21	.33	.24	.36	1.1	1.2	.040	.010	<.010
AUG 17...	--	--	--	--	--	--	--	--	--	--
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)										
APR , 1982 21...	.140	1.8	1.5	1.90	1.6	2.9	2.6	.110	.030	.030
AUG 17...	--	--	--	--	--	--	--	--	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
HUDSON RIVER BASIN--Continued										
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)										
APR , 1982 21...	<.010	<1	<1	20	10	17	4	350	82	6
AUG 17...	--	1	<1	10	10	10	5	220	39	5
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)										
APR , 1982 21...	.010	<1	--	20	10	16	--	1000	--	13
AUG 17...	--	1	<1	10	10	7	9	360	33	5
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)										
APR , 1982 21...	<.010	<1	<1	20	10	12	4	600	60	6
AUG 17...	--	1	<1	10	<10	7	4	740	13	4
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)										
APR , 1982 21...	.030	<1	--	20	10	20	--	560	--	6
AUG 17...	--	2	<1	10	10	13	10	450	24	6

DATE	TIME	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)												
AUG , 1982 24...	1550	<1	3	<10	4	1000	20	150	<10	25	4.0	17
01376410 - SAW MILL RIVER AT EASTVIEW NY (LAT 41 04 48 LONG 073 49 40)												
AUG , 1982 24...	1515	<1	2	<10	2	880	10	220	<10	17	1.1	5.9
01376443 - SAW MILL RIVER AT WOODLANDS NY (LAT 41 01 23 LONG 073 50 44)												
AUG , 1982 24...	1345	<1	6	<10	33	2200	30	180	<10	24	12	3.0
01376450 - SAW MILL RIVER AT MOUNT HOPE NY (LAT 40 59 09 LONG 073 51 54)												
AUG , 1982 24...	1300	<1	8	<10	5	1500	20	84	<10	19	13	1.7
01376470 - SAW MILL RIVER AT OLD NEPPERHAN RD AT YONKERS NY (LAT 40 57 18 LONG 073 52 28)												
AUG , 1982 24...	1145	<1	6	<10	45	920	50	82	<10	33	8.2	4.8
01376495 - SAW MILL RIVER AT ASHBURTON AVE AT YONKERS NY (LAT 40 56 18 LONG 073 53 05)												
NOV , 1981 17...	1055	<1	7	--	20	2800	20	88	10	63	--	--
APR , 1982 21...	1115	<4	6	<10	340	150	50	110	<10	230	3.6	6.4
AUG 24...	1110	1	10	<10	23	2400	60	180	10	54	100	10
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)												
AUG , 1982 24...	1015	1	3	<10	13	1600	70	120	<10	71	4.4	5.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)
HUDSON RIVER BASIN--Continued												
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)												
APR , 1982 21...	1550	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
AUG 17...	1420	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)												
APR , 1982 21...	1440	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
AUG 17...	1330	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)												
APR , 1982 21...	1240	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
AUG 17...	1210	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)												
APR , 1982 21...	1020	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01
AUG 17...	1100	<.01	<.10	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01	<.01

DATE	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BROM-OFORM TOTAL (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHYL-ENE TOTAL (UG/L)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)												
APR , 1982 21...	<.01	<.10	<.10	<.10	<1	--	--	--	--	--	--	--
AUG 17...	<.01	<.10	<.10	<.10	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)												
APR , 1982 21...	<.01	<.10	<.10	<.10	<1	--	--	--	--	--	--	--
AUG 17...	<.01	<.10	<.10	<.10	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)												
APR , 1982 21...	<.01	<.10	<.10	<.10	<1	--	--	--	--	--	--	--
AUG 17...	<.01	<.10	<.10	<.10	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)												
APR , 1982 21...	<.01	<.10	<.10	<.10	<1	--	--	--	--	--	--	--
AUG 17...	<.01	<.10	.10	<.10	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	CHLORO-FORM TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLOURO-METHANE TOTAL (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)
HUDSON RIVER BASIN--Continued											
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	--	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	PARA-CHLORO-META CRESOL TOTAL (UG/L)	PENTA-CHLORO-PHENOL TOTAL (UG/L)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	<1.0	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	<1.0	--
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982 21...	--	--	--	--	--	--	--	--	--	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

HUDSON RIVER BASIN--Continued

DATE	PHENOL (C6H-5OH) TOTAL (UG/L)	2-CHLORO-PHENOL TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	DI-NITRO-PHENOL TOTAL (UG/L)	2,4,-TRI-CHLORO-PHENOL TOTAL (UG/L)	2,4,6-4-NITRO-PHENOL TOTAL (UG/L)	DINITRO-ORTHO-CRESOL TOTAL (UG/L)	4,6-ACE-NAPHTH-ENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	ANTHRA-CENE TOTAL (UG/L)	BENZI-DINE TOTAL (UG/L)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/L)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L)
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982											
21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG											
17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

HUDSON RIVER BASIN--Continued

01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)

DATE	CHRYSENE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)

DATE	CHRYSENE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)

DATE	CHRYSENE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)

DATE	CHRYSENE TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-OCTYL PHTHALATE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DIMETHYL PHTHALATE TOTAL (UG/L)	FLUORANTHENE TOTAL (UG/L)	FLUORENE TOTAL (UG/L)	HEXACHLOROBENZENE TOTAL (UG/L)	HEXACHLOROBUTADIENE TOTAL (UG/L)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L)	HEXACHLOROETHANE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)

DATE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	N-NITROSODIMETHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITROSODIPHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)

DATE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	N-NITROSODIMETHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITROSODIPHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)

DATE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	N-NITROSODIMETHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITROSODIPHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)

DATE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISOPHORONE TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	N-NITROSODIMETHYLAMINE TOTAL (UG/L)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L)	N-NITROSODIPHENYLAMINE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NITROBENZENE TOTAL (UG/L)	PHENANTHRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	1,2-DICHLOROBENZENE TOTAL (UG/L)
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-NAPH-THALENE TOTAL (UG/L)	2,3,7,8 TETRACH LORODI-BENZO-P -DIOXIN TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	3,3'-DI-CHLORO-BENZI-DINE TOTAL (UG/L)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L)
HUDSON RIVER BASIN--Continued											
01376320 - SAW MILL RIVER AT PLEASANTVILLE NY (LAT 41 07 55 LONG 073 47 47)											
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376420 - SAW MILL RIVER AT ELMSFORD NY (LAT 41 03 19 LONG 073 49 16)											
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376460 - SAW MILL RIVER AT GREY OAKS AT YONKERS NY (LAT 40 57 58 LONG 073 52 19)											
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
01376503 - SAW MILL RIVER AT ELM ST AT YONKERS NY (LAT 40 56 03 LONG 073 53 00)											
APR , 1982 21...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
AUG 17...	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR DELMAR, NY

LOCATION.--Lat 42°36'36", long 73°53'34", Albany County, at New York State Department of Environmental Conservation's Five River Educational Center, 600 ft (182 m) northwest of vistor's center, 0.7 mi (1.1 km) north of State Highway 443, 3.0 mi (4.8 km) west of Delmar.

PERIOD OF RECORD.--December 1979 to September 1982 (monthly composite, discontinued).
November 1980 to October 1982 (storm event wetfall, discontinued).
November 1980 to October 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

CHEMICAL ANALYSES, OCTOBER 1981 TO SEPTEMBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/05 TO 81/11/05	2.20	.55	.08	.12	.09	2.70
81/11/05 TO 81/11/30	1.28	.36	.02	.17	.08	3.50
81/11/30 TO 82/01/02	3.24	.36	.30	.11	.07	2.30
82/01/02 TO 82/01/31	3.07	.44	.16	.30	.04	2.10
82/03/01 TO 82/04/01	2.46	.59	.05	.21	.03	2.00
82/04/01 TO 82/05/01	2.10	.40	.06	.12	.04	1.33
82/05/01 TO 82/05/31	3.05	.72	.15	.31	.27	4.13
82/05/31 TO 82/06/14	3.54	.16	.03	.11	.08	.72
82/07/01 TO 82/08/02	2.05	.44	.08	.04	.33	4.78
82/08/02 TO 82/09/02	.88	.84	.12	.08	.45	5.00
82/09/02 TO 82/10/01	1.75	1.30	.15	.24	.09	4.49

PERIOD OF COLLECTION	CHLO-RIDE (CL) (MG/L)	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/05 TO 81/11/05	.35	.54	.48	.05	19	4.65
81/11/05 TO 81/11/30	.30	.94	.57	.03	33	4.24
81/11/30 TO 82/01/02	.23	.60	.35	.03	24	4.40
82/01/02 TO 82/01/31	.32	.45	.16	.01	26	4.38
82/03/01 TO 82/04/01	.37	.52	.23	.03	25	4.37
82/04/01 TO 82/05/01	.10	.25	.10	<.06	11	4.90
82/05/01 TO 82/05/31	.52	.52	.95	<.06	23	5.07
82/05/31 TO 82/06/14	<.20	.15	.20	<.06	8	5.10
82/07/01 TO 82/08/02	<.20	.56	1.10	.09	27	4.62
82/08/02 TO 82/09/02	<.20	1.13	2.10	.10	45	4.50
82/09/02 TO 82/10/01	.38	.59	.78	<.06	29	4.60

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR DELMAR, NY--Continued

CHEMICAL ANALYSES, SEPTEMBER 1981 TO OCTOBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/09/28 TO 81/10/05	.38	.36	.01	.08	.03	1.80
81/10/05 TO 81/10/26	1.50	.16	.02	.07	.19	1.80
81/10/26 TO 81/11/02	1.05	.12	.06	.13	.09	1.80
81/11/09 TO 81/11/16	.20	.16	.01	.06	.03	2.50
81/12/09 TO 81/12/12	E .50	.09	.22	.06	.04	.80
81/12/12 TO 81/12/16	.48	.09	.22	.06	.05	2.00
81/12/16 TO 81/12/17	.84	.04	.18	.04	.04	.10
81/12/17 TO 81/12/25	.71	.31	.21	.16	.06	3.40
81/12/25 TO 82/01/02	.58	.37	.10	.11	.04	1.10
82/01/02 TO 82/01/05	.90	.13	.21	.07	.03	1.40
82/01/05 TO 82/01/18	.56	.59	.21	.31	.04	1.00
82/01/18 TO 82/01/26	.45	.37	.26	.34	.03	.10
82/01/26 TO 82/02/01	1.20	.26	.11	.29	.04	2.40
82/02/01 TO 82/02/07	1.14	.10	.07	.13	.02	1.10
82/02/07 TO 82/02/14	.26	----	----	----	----	1.70
82/02/14 TO 82/02/22	.38	.68	.12	.45	.04	2.00
82/03/02 TO 82/03/09	1.08	.42	.09	.17	.03	1.80
82/03/15 TO 82/03/22	.63	.85	.08	.26	.11	4.00
82/03/22 TO 82/03/29	.38	----	----	----	----	3.00
82/03/29 TO 82/04/05	.68	.68	.05	.05	.05	2.00
82/04/05 TO 82/04/12	1.15	.31	.02	.14	.05	1.00
82/04/12 TO 82/04/19	.60	.57	.08	.17	.04	2.40
82/04/19 TO 82/05/03	.35	1.30	.22	.30	.09	3.62
82/05/03 TO 82/05/10	.40	.98	.16	.12	.39	3.47
82/05/17 TO 82/05/24	2.05	.29	.04	.11	.07	4.36
82/05/24 TO 82/05/31	.60	.23	.03	.09	.09	2.53
82/05/31 TO 82/06/07	3.10	.10	.01	.11	.03	.41
82/06/07 TO 82/06/14	.44	.25	.04	.12	.05	1.19
82/06/14 TO 82/06/21	.58	.37	.05	.19	.10	7.29
82/06/21 TO 82/06/24	.53	.23	.04	.10	.03	3.54
82/06/24 TO 82/06/28	.25	.63	.09	.07	.05	10.50
82/06/28 TO 82/07/05	.92	.11	.02	.04	.02	3.37
82/07/05 TO 82/08/02	2.05	.14	.02	.03	.01	4.98
82/08/02 TO 82/08/06	E .20	.26	.03	.01	.08	2.69
82/08/18 TO 82/08/26	.53	1.00	.13	.37	.08	11.60
82/09/14 TO 82/09/21	.17	----	----	----	----	----
82/09/21 TO 82/09/24	.98	.08	.01	.10	.01	1.73
82/09/24 TO 82/09/27	.52	.15	.04	.22	.10	1.18
82/10/04 TO 82/10/18	.09	----	----	----	----	----
82/10/25 TO 82/11/01	.19	2.10	.24	.30	.10	8.51

E Estimated.

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR DELMAR, NY--Continued

CHEMICAL ANALYSES, SEPTEMBER 1981 TO OCTOBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
81/09/28 TO 81/10/05	.01	.64	.33	.01	43	4.50
81/10/05 TO 81/10/26	.17	.31	.13	.01	17	4.50
81/10/26 TO 81/11/02	.20	.30	.14	.02	18	4.46
81/11/09 TO 81/11/16	.18	.55	.15	<.01	28	4.19
81/12/09 TO 81/12/12	.25	.60	.18	.01	18	4.40
81/12/12 TO 81/12/16	.15	.40	.16	.01	24	4.29
81/12/16 TO 81/12/17	.50	.28	.01	<.01	11	4.61
81/12/17 TO 81/12/25	.40	.72	.21	.01	38	4.10
81/12/25 TO 82/01/02	.27	.35	.09	.01	13	4.72
82/01/02 TO 82/01/05	.13	.17	.05	<.01	14	4.51
82/01/05 TO 82/01/18	.74	.43	.10	<.01	12	4.41
82/01/18 TO 82/01/26	.33	.22	.12	.01	8	6.26
82/01/26 TO 82/02/01	.43	.47	.18	.01	32	4.25
82/02/01 TO 82/02/07	.04	.16	.04	----	15	4.72
82/02/07 TO 82/02/14	.53	----	----	----	30	4.60
82/02/14 TO 82/02/22	.75	.51	.17	----	17	4.56
82/03/02 TO 82/03/09	.37	.36	.14	----	16	4.47
82/03/15 TO 82/03/22	.25	1.10	.60	----	51	4.08
82/03/22 TO 82/03/29	.15	.35	.15	----	21	4.57
82/03/29 TO 82/04/05	.22	.31	.20	----	25	4.36
82/04/05 TO 82/04/12	.09	.22	.10	----	15	4.63
82/04/12 TO 82/04/19	.10	.40	.07	<.06	19	4.65
82/04/19 TO 82/05/03	.33	.40	.13	<.06	19	5.73
82/05/03 TO 82/05/10	.10	.44	.43	<.06	18	5.34
82/05/17 TO 82/05/24	<.20	.35	.35	<.06	39	4.10
82/05/24 TO 82/05/31	<.20	.33	.18	<.06	28	4.32
82/05/31 TO 82/06/07	<.20	<.05	.02	<.06	8	5.10
82/06/07 TO 82/06/14	.26	.17	.19	<.06	10	5.00
82/06/14 TO 82/06/21	.36	.88	.52	<.06	76	3.78
82/06/21 TO 82/06/24	<.20	.71	.43	<.06	50	3.96
82/06/24 TO 82/06/28	<.20	.79	----	<.06	87	3.75
82/06/28 TO 82/07/05	<.20	.47	.10	<.06	39	4.10
82/07/05 TO 82/08/02	<.20	.28	.27	<.06	48	4.03
82/08/02 TO 82/08/06	<.20	.32	.51	<.06	23	4.40
82/08/18 TO 82/08/26	.70	.66	.77	.17	92	3.76
82/09/14 TO 82/09/21	----	----	----	----	555	2.98
82/09/21 TO 82/09/24	.40	.16	.16	<.06	19	4.39
82/09/24 TO 82/09/27	.61	.20	.78	<.06	10	5.92
82/10/04 TO 82/10/18	----	----	----	----	103	3.81
82/10/25 TO 82/11/01	.38	.83	.28	<.06	30	4.75

CHEMICAL QUALITY OF PRECIPITATION

HUDSON RIVER BASIN

NEAR DELMAR, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/01	----	3.00	.45	.46	4.30	8.40
81/11/01 TO 81/11/30	----	.39	.01	.15	.07	3.20
81/11/30 TO 82/01/02	----	2.10	.99	.39	1.00	3.80
81/12/31 TO 82/02/01	----	1.90	.31	1.10	.11	4.40
82/02/01 TO 82/03/01	----	1.90	.15	1.10	.09	2.70
82/03/01 TO 82/04/01	----	.60	.04	.47	.07	4.00
82/04/01 TO 82/04/31	----	3.20	.58	.64	1.80	5.50
82/04/31 TO 82/06/03	----	2.50	1.10	.46	2.60	6.11
82/07/01 TO 82/08/05	----	3.80	.60	.26	3.10	6.13
82/08/23 TO 82/09/02	----	2.20	.26	.25	.23	4.58
82/09/02 TO 82/10/01	----	2.00	.25	.36	.09	4.85
82/10/01 TO 82/11/01	----	2.10	.26	.34	.11	3.60

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/10/01 TO 81/11/01	.45	.65	.84	.74	44	6.65
81/11/01 TO 81/11/30	.16	.27	.14	<.01	11	5.22
81/11/30 TO 82/01/02	.60	.73	.25	.63	24	5.87
81/12/31 TO 82/02/01	1.30	.78	.25	.02	33	4.20
82/02/01 TO 82/03/01	1.20	.53	.10	.02	20	5.66
82/03/01 TO 82/04/01	.18	.62	.07	.03	22	6.48
82/04/01 TO 82/04/31	.59	.37	9.30	.91	112	7.78
82/04/31 TO 82/06/03	1.25	.48	2.60	<.06	56	6.80
82/07/01 TO 82/08/05	.24	.61	.16	.62	40	6.57
82/08/23 TO 82/09/02	<.20	.52	.26	<.06	21	5.92
82/09/02 TO 82/10/01	.18	.36	.16	<.06	20	5.79
82/10/01 TO 82/11/01	.27	.29	.03	<.06	19	6.45

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT STILLWATER RESERVOIR, NY

LOCATION.--Lat 43°53'28", long 75°02'10", Herkimer County, at National Weather Service station "Stillwater Reservoir", 0.3 mi (0.5 km) northwest of New York State Department of Environmental Conservation forest ranger's cabin, 0.8 mi (1.3 km) southeast of Stillwater Reservoir dam, and 6.8 mi (10.9 km) west of Beaver River.

PERIOD OF RECORD.--October 1977 to September 1982 (monthly composite, discontinued).
October 1981 to October 1982 (storm event wetfall, discontinued).
October 1981 to October 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, OCTOBER 1981 TO SEPTEMBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/01	6.86	.11	.05	.07	.06	1.00
81/11/01 TO 81/11/30	3.09	.05	.01	.08	.06	3.30
81/11/30 TO 82/01/02	2.03	.28	.11	.10	.13	2.40
82/01/02 TO 82/02/01	3.19	.14	.11	.11	.05	1.50
82/02/01 TO 82/02/28	1.27	.21	.04	.16	.10	.40
82/02/28 TO 82/03/31	3.25	.27	.02	.22	.04	E 5.00
82/03/31 TO 82/04/30	4.05	.20	.04	.10	.04	2.64
82/04/30 TO 82/06/01	2.02	1.60	.20	.12	.34	5.51
82/06/30 TO 82/07/31	2.68	.82	.08	.03	.12	6.12
82/07/31 TO 82/08/31	6.00	----	----	----	----	----
82/08/31 TO 82/09/30	4.84	----	----	----	----	----

PERIOD OF COLLECTION	CHLO- RIDE (CL) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/10/01 TO 81/11/01	.12	.32	.15	.01	17	4.48
81/11/01 TO 81/11/30	.20	.72	.38	.01	25	4.16
81/11/30 TO 82/01/02	.29	1.10	.48	.02	40	4.13
82/01/02 TO 82/02/01	.16	.63	.21	.01	30	4.02
82/02/01 TO 82/02/28	.07	.95	.25	.02	45	3.87
82/02/28 TO 82/03/31	.29	1.20	.40	.01	57	3.98
82/03/31 TO 82/04/30	.25	.45	.32	<.06	27	4.36
82/04/30 TO 82/06/01	<.20	1.14	.68	<.06	44	4.30
82/06/30 TO 82/07/31	<.20	.73	.42	<.06	48	4.07
82/07/31 TO 82/08/31	----	----	----	----	41	4.30
82/08/31 TO 82/09/30	----	----	----	----	--	3.54

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* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT STILLWATER RESERVOIR, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/15 TO 81/10/19	.88	.62	.05	.07	.03	1.90
81/10/19 TO 81/10/27	2.53	.03	.06	.05	.02	.80
81/10/27 TO 81/10/28	1.44	.01	.01	.06	.02	.50
81/10/28 TO 81/11/09	1.05	.13	.01	.02	.16	.80
81/11/09 TO 81/12/10	.84	.14	.14	.27	.18	2.10
81/12/10 TO 82/01/04	.48	.05	.11	.08	.03	.80
82/01/04 TO 82/02/03	2.86	.08	.11	.12	.05	1.30
82/02/03 TO 82/03/26	3.91	.12	.01	.17	.02	5.00
82/03/26 TO 82/04/01	1.00	.14	.05	.21	.03	5.00
82/04/01 TO 82/04/05	.91	.11	.01	.16	.02	----
82/04/05 TO 82/04/18	2.07	.20	.02	.04	.04	2.00
82/04/18 TO 82/05/31	2.02	.11	.03	.11	.02	1.79
82/05/31 TO 82/06/07	2.54	.07	.01	.07	.02	2.55
82/06/07 TO 82/06/24	1.67	.09	.02	.03	.02	2.38
82/06/24 TO 82/06/28	.80	.10	.01	.04	.02	2.02
82/06/28 TO 82/06/30	.61	.06	.01	.04	.02	2.09
82/07/08 TO 82/07/28	1.95	.02	.01	.03	.01	2.93
82/07/29 TO 82/07/31	.05	----	----	----	----	6.04
82/07/31 TO 82/08/11	2.50	.07	.01	.01	.02	3.40
82/08/11 TO 82/08/26	2.99	.16	.03	.02	.01	3.50
82/08/26 TO 82/09/02	1.41	.10	.01	.01	.02	3.74
82/09/02 TO 82/09/16	1.61	.09	.01	.10	.01	2.74
82/09/16 TO 82/09/24	1.44	.08	.01	.10	.01	.76
82/09/24 TO 82/10/08	2.05	.06	.02	.09	.06	3.59

PERIOD OF COLLECTION	CHLO- RIDE (CL) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/10/15 TO 81/10/19	<.01	.48	.22	<.01	27	4.50
81/10/19 TO 81/10/27	.39	.22	.08	.01	12	4.57
81/10/27 TO 81/10/28	.25	<.10	.01	<.01	5	4.94
81/10/28 TO 81/11/09	.23	.41	.15	<.01	19	4.42
81/11/09 TO 81/12/10	.55	.57	.26	.02	28	4.29
81/12/10 TO 82/01/04	.18	.32	.04	.03	12	4.55
82/01/04 TO 82/02/03	.11	.47	.12	.01	24	4.51
82/02/03 TO 82/03/26	.40	.72	.27	----	37	4.07
82/03/26 TO 82/04/01	.34	.38	.17	----	23	4.35
82/04/01 TO 82/04/05	.20	.19	.09	----	15	4.59
82/04/05 TO 82/04/18	.11	.37	.29	----	26	4.31
82/04/18 TO 82/05/31	.22	.32	.18	<.06	25	4.34
82/05/31 TO 82/06/07	.22	.28	.22	<.06	30	4.23
82/06/07 TO 82/06/24	<.20	.35	.21	<.06	27	4.26
82/06/24 TO 82/06/28	<.20	.31	.20	<.06	23	4.37
82/06/28 TO 82/06/30	<.20	.26	.16	<.06	22	4.36
82/07/08 TO 82/07/28	<.20	.21	.16	<.06	34	4.18
82/07/29 TO 82/07/31	.22	.99	----	<.06	73	3.86
82/07/31 TO 82/08/11	<.20	.12	.26	<.06	33	4.16
82/08/11 TO 82/08/26	<.20	.19	.30	<.06	31	4.32
82/08/26 TO 82/09/02	<.20	.18	.26	<.06	39	4.06
82/09/02 TO 82/09/16	.58	.42	.15	<.06	26	4.29
82/09/16 TO 82/09/24	.50	.12	.03	<.06	10	4.70
82/09/24 TO 82/10/08	.34	.35	.29	<.06	32	4.18

CHEMICAL QUALITY OF PRECIPITATION

LAKE ONTARIO BASIN

AT STILLWATER RESERVOIR, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/15 TO 81/11/30	----	.49	.03	.18	.46	5.70
81/11/30 TO 82/01/02	----	.47	.14	.26	.09	3.40
82/01/02 TO 82/02/01	----	.41	.16	.33	.10	2.20
82/02/01 TO 82/02/28	----	.08	.05	.09	.02	----
82/02/28 TO 82/03/31	----	.58	.05	.32	.07	5.00
82/03/31 TO 82/04/30	----	1.30	.21	.14	.16	3.00
82/04/30 TO 82/06/01	----	.85	.31	.16	2.10	6.82
82/06/01 TO 82/06/30	----	.69	.12	.05	.96	3.55
82/06/30 TO 82/07/31	----	1.30	.12	.04	.16	2.69
82/07/31 TO 82/08/31	----	.76	.12	.03	.15	3.73
82/08/31 TO 82/09/30	----	.55	.06	.18	.11	2.58
82/09/30 TO 82/11/01	----	.52	.08	.06	.31	1.54

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)
81/10/15 TO 81/11/30	.28	.84	.52	.01	39	4.24
81/11/30 TO 82/01/02	.42	1.00	.62	<.01	39	4.16
82/01/02 TO 82/02/01	.38	.72	.34	.02	35	4.27
82/02/01 TO 82/02/28	.17	.25	.07	.04	13	4.72
82/02/28 TO 82/03/31	.36	.85	.44	.01	47	4.10
82/03/31 TO 82/04/30	<.20	.30	.11	<.06	14	6.04
82/04/30 TO 82/06/01	<.20	.05	6.00	.74	53	7.03
82/06/01 TO 82/06/30	<.20	.26	.26	<.06	17	5.04
82/06/30 TO 82/07/31	<.20	.21	.04	<.06	12	5.81
82/07/31 TO 82/08/31	<.20	.10	.47	<.06	21	4.76
82/08/31 TO 82/09/30	<.20	.07	.39	<.06	12	5.24
82/09/30 TO 82/11/01	<.20	.21	.20	<.06	9	5.60

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

AT LAKE GEORGE, NY

LOCATION.--Lat 43°25'00", long 73°42'03", Warren County, in Lake George Battlefield Park, 0.2 mi (0.3 km) south of the south end of Lake George, 0.6 mi (0.9 km) east of U.S. Highway 9, 0.2 mi south of Village of Lake George and 0.7 mi (1.1 km) east of Interstate Highway 87. Prior to May 28, 1981, at Lat 43°24'58", long 73°42'31", 0.4 mi (0.6 km) west of current location.

PERIOD OF RECORD.--June 1980 to October 1982 - (monthly composite).
June 1980 to November 1982 - (storm event wetfall).
June 1980 to September 1982 - (monthly dustfall).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

CHEMICAL ANALYSES, SEPTEMBER 1981 TO OCTOBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/09/30 TO 81/11/02	5.08	.13	.05	.09	.05	2.30
81/11/02 TO 81/11/30	1.60	.13	.01	.11	.06	4.40
81/11/30 TO 81/12/31	2.99	.34	.34	.40	.09	17.00
81/12/31 TO 82/02/05	7.47	.17	.26	.29	.05	1.30
82/02/05 TO 82/03/01	.98	----	----	----	----	.38
82/03/01 TO 82/03/31	3.69	.51	.03	.34	.03	8.50
82/03/31 TO 82/05/03	2.49	.77	.23	.15	.10	2.89
82/05/03 TO 82/05/31	3.31	.39	.10	.07	.10	3.93
82/05/31 TO 82/06/30	4.93	.19	.05	.05	.19	.18
82/08/02 TO 82/09/01	1.87	.49	.10	.03	.04	4.83
82/09/01 TO 82/10/01	2.22	.63	.28	2.00	.17	6.26
82/10/01 TO 82/10/29	1.56	.48	.11	.24	.11	7.85

PERIOD OF COLLECTION	CHLO- RIDE (CL) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- MHOS)	PH (UNITS)
81/09/30 TO 81/11/02	.15	.21	.19	.01	30	4.18
81/11/02 TO 81/11/30	.29	.96	.23	.01	51	3.98
81/11/30 TO 81/12/31	.71	.63	.15	.02	150	3.51
81/12/31 TO 82/02/05	.36	.29	.04	.01	18	4.44
82/02/05 TO 82/03/01	.58	.81	.19	.02	36	4.20
82/03/01 TO 82/03/31	.39	.77	.19	.01	77	3.84
82/03/31 TO 82/05/03	.10	.44	.13	<.06	23	4.49
82/05/03 TO 82/05/31	.22	.32	.27	<.06	33	4.27
82/05/31 TO 82/06/30	<.20	.41	.35	<.06	33	4.23
82/08/02 TO 82/09/01	<.20	.61	.32	<.06	52	4.00
82/09/01 TO 82/10/01	2.95	.76	.64	<.06	53	3.98
82/10/01 TO 82/10/29	.41	1.80	.99	<.06	89	3.77

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CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

AT LAKE GEORGE, NY--Continued

CHEMICAL ANALYSES, SEPTEMBER 1981 TO NOVEMBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/09/24 TO 81/10/19	1.88	.26	.01	.53	.50	3.10
81/10/19 TO 81/10/28	3.15	.03	.05	.10	.03	1.40
81/10/28 TO 81/11/19	.75	.12	.03	.20	.07	5.40
81/11/19 TO 81/11/25	.65	----	----	----	----	3.80
81/11/25 TO 81/12/14	.89	1.20	1.40	6.10	.07	3.90
81/12/14 TO 81/12/21	.68	.09	.18	.21	.03	.30
81/12/21 TO 81/12/29	1.62	1.10	.21	.74	.56	1.10
81/12/29 TO 82/01/05	2.22	.04	.17	.06	.02	.50
82/01/05 TO 82/01/28	1.99	.24	.19	.67	.02	1.00
82/01/28 TO 82/02/01	1.71	.07	.64	.19	.04	1.20
82/02/01 TO 82/02/05	1.59	.23	.18	.20	.06	.80
82/02/05 TO 82/03/01	.98	.53	.05	.80	.05	2.40
82/03/01 TO 82/03/10	1.52	.27	.09	.27	.04	1.40
82/03/10 TO 82/03/18	1.05	.37	.12	.17	.04	2.10
82/03/18 TO 82/03/26	.87	.50	.07	.30	.05	6.00
82/03/26 TO 82/04/01	.76	.57	.22	.24	.03	5.00
82/04/01 TO 82/04/05	1.14	.43	.08	.14	.02	5.00
82/04/05 TO 82/04/27	1.35	2.20	.57	.38	.16	5.65
82/04/27 TO 82/05/20	1.04	.25	.05	.51	.08	4.25
82/05/20 TO 82/05/25	1.62	.11	.01	.06	.01	1.60
82/05/25 TO 82/06/03	.97	.08	.01	.12	.03	1.46
82/06/03 TO 82/06/08	1.43	1.00	.16	.22	.37	.63
82/06/08 TO 82/06/17	1.22	.12	.03	.17	.04	3.46
82/06/17 TO 82/06/30	1.97	.03	.01	.03	.01	3.20
82/06/30 TO 82/08/02	1.77	.09	.02	.02	.01	3.96
82/08/02 TO 82/08/19	1.37	1.30	.15	.62	1.00	6.45
82/08/19 TO 82/09/02	.89	.11	.01	.02	.04	3.63
82/09/02 TO 82/09/23	.98	.32	.05	.17	.01	9.48
82/09/23 TO 82/09/28	.74	.12	.02	.22	.01	.86
82/09/28 TO 82/10/08	1.15	.23	.10	.19	.12	8.70
82/10/25 TO 82/11/05	1.73	.10	.04	.25	.04	1.06

PERIOD OF COLLECTION	CHLO- RIDE (CL) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/09/24 TO 81/10/19	.51	.61	.42	.01	39	4.17
81/10/19 TO 81/10/28	.17	.24	.02	<.01	15	4.48
81/10/28 TO 81/11/19	.29	1.30	.36	<.01	66	3.87
81/11/19 TO 81/11/25	.89	.92	.80	.02	55	4.03
81/11/25 TO 81/12/14	8.20	.93	.22	.01	62	4.32
81/12/14 TO 81/12/21	.37	.56	.01	<.01	18	4.47
81/12/21 TO 81/12/29	2.40	.44	.18	.01	28	4.53
81/12/29 TO 82/01/05	.34	.24	.02	.01	11	4.63
82/01/05 TO 82/01/28	.63	.27	.07	.01	12	4.42
82/01/28 TO 82/02/01	.15	.29	.03	.00	19	4.40
82/02/01 TO 82/02/05	.09	.17	.02	.02	11	5.74
82/02/05 TO 82/03/01	.83	1.00	.13	.01	32	4.96
82/03/01 TO 82/03/10	1.80	.57	.11	----	28	4.22
82/03/10 TO 82/03/18	.40	.41	.12	----	21	4.40
82/03/18 TO 82/03/26	.48	1.00	.32	----	67	3.88
82/03/26 TO 82/04/01	.31	.33	.17	----	15	4.79
82/04/01 TO 82/04/05	.16	.21	.11	----	16	4.66
82/04/05 TO 82/04/27	.27	1.12	.44	<.06	38	4.57
82/04/27 TO 82/05/20	.22	.42	.34	<.06	42	4.17
82/05/20 TO 82/05/25	<.20	.13	.09	<.06	16	4.54
82/05/25 TO 82/06/03	<.20	.20	.06	<.06	17	4.46
82/06/03 TO 82/06/08	.32	<.05	.15	<.06	13	6.74
82/06/08 TO 82/06/17	<.20	.60	.33	<.06	44	4.10
82/06/17 TO 82/06/30	<.20	.38	.20	<.06	38	4.14
82/06/30 TO 82/08/02	<.20	.48	.20	<.06	46	4.03
82/08/02 TO 82/08/19	1.13	.36	4.90	.40	62	7.19
82/08/19 TO 82/09/02	<.20	.43	.39	<.06	41	4.06
82/09/02 TO 82/09/23	.31	.88	.73	<.06	86	3.75
82/09/23 TO 82/09/28	.19	.16	.05	<.06	13	4.58
82/09/28 TO 82/10/08	.38	1.50	.80	<.06	92	3.73
82/10/25 TO 82/11/05	.34	.20	.08	<.06	13	4.61

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

AT LAKE GEORGE, NY--Continued

CHEMICAL ANALYSES, SEPTEMBER 1981 TO SEPTEMBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/09/30 TO 81/11/02	----	.57	.09	.15	.08	2.40
81/11/02 TO 81/11/30	----	.22	.03	1.90	.25	2.70
81/11/30 TO 81/12/31	----	.97	1.30	2.10	.04	2.30
81/12/31 TO 82/02/01	----	.79	.27	2.00	.04	1.70
82/02/01 TO 82/03/01	----	.95	.33	.71	.03	.30
82/03/01 TO 82/03/31	----	1.40	.40	.64	.04	5.00
82/03/31 TO 82/05/03	----	3.30	.43	.64	.67	3.47
82/05/03 TO 82/05/31	----	1.50	.45	.45	1.70	4.03
82/05/31 TO 82/06/30	----	2.80	.74	.25	2.70	5.18
82/06/30 TO 82/08/02	----	1.40	.42	.13	.77	3.21
82/08/02 TO 82/09/01	----	1.70	.61	.51	2.50	3.99
82/09/01 TO 82/10/01	----	.58	.15	.14	.02	1.68

PERIOD OF COLLECTION	CHLO-RIDE (CL) (MG/L)	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/09/30 TO 81/11/02	.21	.43	.08	.01	11	5.29
81/11/02 TO 81/11/30	2.40	.27	.25	.10	20	5.15
81/11/30 TO 81/12/31	2.10	1.00	.15	.01	29	4.58
81/12/31 TO 82/02/01	1.90	.59	.10	.01	21	5.23
82/02/01 TO 82/03/01	.52	----	----	----	14	6.58
82/03/01 TO 82/03/31	.22	.40	.15	.01	17	6.27
82/03/31 TO 82/05/03	.23	.48	.58	<.06	34	7.09
82/05/03 TO 82/05/31	.54	.19	1.40	.62	32	6.85
82/05/31 TO 82/06/30	.39	.47	1.80	.62	47	7.10
82/06/30 TO 82/08/02	.32	.31	.58	.22	18	5.85
82/08/02 TO 82/09/01	.64	.34	1.50	.61	38	7.98
82/09/01 TO 82/10/01	<.20	.47	.14	<.06	9	5.50

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY

LOCATION.--Lat 44°34'40", long 75°06'40", St. Lawrence County, at National Weather Service station "Canton 4SE," on the Canton State University Farm on State Highway 68, 2.5 mi (4.0 km) southeast of U.S. Highway 11 and Canton.

PERIOD OF RECORD.--August 1965 to September 1982 (monthly composite, discontinued).
October 1981 to November 1982 (storm event wetfall, discontinued).
October 1981 to October 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level and is protected by a windshield.

REMARKS.--Inches of precipitation is that for the National Weather Service station for the reported period of sampling.

CHEMICAL ANALYSES, OCTOBER 1981 TO SEPTEMBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/02	4.46	.20	.01	.02	.09	1.90
81/11/02 TO 81/12/01	2.68	.28	.02	.09	.07	2.10
81/12/01 TO 82/01/01	1.66	.55	----	.91	.10	1.90
82/01/01 TO 82/02/01	3.02	.68	.48	.78	.09	1.40
82/02/01 TO 82/03/01	1.72	1.20	.46	.87	.10	1.20
82/03/01 TO 82/04/01	2.89	1.40	.62	.69	.09	5.00
82/04/01 TO 82/05/04	1.71	1.10	.44	.18	.08	3.77
82/05/04 TO 82/06/01	1.90	1.90	.65	.20	.27	5.57
82/07/01 TO 82/08/02	2.80	1.10	.33	.05	.31	3.51
82/08/02 TO 82/09/01	4.27	.47	.11	.02	.08	3.39
82/09/01 TO 82/10/01	3.08	.49	.10	.11	.04	3.45

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/01 TO 81/11/02	.28	.59	.45	.01	18	4.50
81/11/02 TO 81/12/01	.28	.45	.24	<.01	21	4.47
81/12/01 TO 82/01/01	1.60	.75	.50	.03	23	4.89
82/01/01 TO 82/02/01	.91	.48	.22	.03	15	5.50
82/02/01 TO 82/03/01	.92	1.10	.28	.03	31	4.04
82/03/01 TO 82/04/01	.88	1.30	.64	.05	34	4.80
82/04/01 TO 82/05/04	<.20	.91	.67	<.06	25	5.33
82/05/04 TO 82/06/01	.69	.87	.69	<.06	32	5.49
82/07/01 TO 82/08/02	.32	.61	.02	<.06	36	4.27
82/08/02 TO 82/09/01	.36	.33	.08	<.06	34	4.17
82/09/01 TO 82/10/01	.64	.35	.05	<.06	36	4.14

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CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/14 TO 81/10/20	.64	.19	.10	.27	.08	1.50
81/10/20 TO 81/10/26	2.70	.07	.06	.07	.03	1.40
81/10/26 TO 81/10/28	1.55	.01	.04	.04	.01	.04
81/10/28 TO 81/11/09	.75	.12	.01	.01	.02	1.50
81/11/09 TO 81/11/23	1.15	.14	.01	.07	.03	2.00
81/11/23 TO 81/12/10	.60	.15	.08	.11	.04	2.00
81/12/10 TO 81/12/24	.90	.12	.12	.09	.06	1.80
81/12/24 TO 81/12/29	.30	.16	.14	.10	.06	1.40
82/01/01 TO 82/01/07	1.40	.13	.08	.11	.03	.90
82/01/07 TO 80/01/25	.60	----	----	----	----	2.00
82/02/01 TO 82/02/08	.45	.12	.20	.16	.04	2.40
82/02/08 TO 82/03/05	.80	----	----	----	----	----
82/03/05 TO 82/03/15	.65	.48	.11	.30	.11	6.70
82/03/15 TO 82/03/22	.50	.70	.13	.19	.07	6.70
82/03/22 TO 82/03/29	.65	.60	.11	.32	.04	5.20
82/03/29 TO 82/04/01	.45	.31	.11	.28	.04	5.00
82/04/01 TO 82/04/14	.60	----	----	----	----	16.00
82/04/14 TO 82/04/21	.80	.52	.06	.18	.07	3.00
82/04/21 TO 82/05/10	3.20	.19	.05	.09	.05	3.48
82/05/10 TO 82/05/27	.90	.15	.03	.09	.05	3.77
82/05/27 TO 82/06/04	1.80	.07	.01	.06	.01	3.95
82/06/04 TO 82/06/07	6.95	.08	.01	.07	.01	<.20
82/06/07 TO 82/06/22	1.02	.62	.07	.12	.04	6.37
82/06/22 TO 82/06/30	.45	.81	.18	.10	.14	10.40
82/06/30 TO 82/07/19	.35	.25	.05	.05	.02	4.41
82/07/19 TO 82/07/29	.80	.02	.01	.01	.01	<.20
82/07/29 TO 82/08/02	1.05	.12	.02	.01	.02	3.05
82/08/02 TO 82/08/09	1.10	.09	.01	.02	.02	3.91
82/08/09 TO 82/08/26	2.85	.21	.03	.01	.04	2.89
82/08/26 TO 82/09/10	2.85	.26	.03	.02	.03	5.33
82/09/10 TO 82/09/20	1.07	.08	.01	.09	.01	.98
82/09/20 TO 82/09/29	.30	.10	.02	.10	.01	4.17
82/09/29 TO 82/10/11	1.15	.04	.02	.07	.02	5.01
82/10/11 TO 82/11/01	1.10	.15	.04	.06	.02	2.94
82/11/01 TO 82/11/05	4.50	.10	.02	.29	.24	1.97
82/11/05 TO 82/11/15	2.10	.07	.02	.05	.02	1.41

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/14 TO 81/10/20	.00	.41	.14	.01	27	4.24
81/10/20 TO 81/10/26	.36	.44	.13	<.01	19	4.39
81/10/26 TO 81/10/28	.10	.16	.02	<.01	9	4.67
81/10/28 TO 81/11/09	.22	.39	.12	<.01	18	4.41
81/11/09 TO 81/11/23	.27	.50	.29	<.01	23	4.31
81/11/23 TO 81/12/10	.25	.58	.22	.02	30	4.22
81/12/10 TO 81/12/24	.14	.46	.08	.02	23	4.31
81/12/24 TO 81/12/29	.23	.74	.17	.04	26	4.27
82/01/01 TO 82/01/07	.10	.26	.06	.02	10	4.71
82/01/07 TO 80/01/25	.35	.44	.20	.01	20	4.07
82/02/01 TO 82/02/08	.15	.48	.19	.01	36	4.07
82/02/08 TO 82/03/05	----	1.90	.92	.02	63	4.10
82/03/05 TO 82/03/15	.74	2.10	.81	----	99	3.76
82/03/15 TO 82/03/22	.55	1.40	.60	----	78	3.75
82/03/22 TO 82/03/29	.26	1.40	.83	----	70	3.90
82/03/29 TO 82/04/01	.22	.62	.32	----	30	4.27
82/04/01 TO 82/04/14	.26	----	----	----	139	3.64
82/04/14 TO 82/04/21	.30	.79	.51	----	44	4.10
82/04/21 TO 82/05/10	.10	.48	.50	<.06	35	4.25
82/05/10 TO 82/05/27	.23	.37	.22	<.06	34	4.17
82/05/27 TO 82/06/04	<.20	.36	.20	<.06	38	4.12
82/06/04 TO 82/06/07	<.20	.05	.02	<.06	6	4.99
82/06/07 TO 82/06/22	<.20	.86	.66	<.06	62	3.91
82/06/22 TO 82/06/30	.41	1.32	1.20	<.06	91	3.83
82/06/30 TO 82/07/19	<.20	.44	.29	<.06	44	4.00
82/07/19 TO 82/07/29	<.20	.09	.04	<.06	5	5.08
82/07/29 TO 82/08/02	<.20	.47	.29	<.06	35	4.17
82/08/02 TO 82/08/09	<.20	.25	.25	<.06	36	4.13
82/08/09 TO 82/08/26	<.20	.26	.30	<.06	27	4.24
82/08/26 TO 82/09/10	<.20	.67	.46	<.06	57	3.96
82/09/10 TO 82/09/20	.20	.13	.18	<.06	46	3.97
82/09/20 TO 82/09/29	.13	.40	.17	<.06	11	4.70
82/09/29 TO 82/10/11	.36	.51	.36	<.06	44	4.10
82/10/11 TO 82/11/01	<.20	.62	.40	<.06	34	4.23
82/11/01 TO 82/11/05	.20	.36	.27	<.06	25	4.30
82/11/05 TO 82/11/15	<.20	.32	.23	<.06	16	4.54

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CANTON, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO OCTOBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPITATION	CALCIUM (CA) (MG/L)	MAGNESIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTASSIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/14 TO 81/11/02	----	.24	.01	.14	.05	2.50
81/11/02 TO 81/12/01	----	.21	.04	.11	.40	2.10
81/12/01 TO 82/01/01	----	.18	.32	.15	.05	1.10
82/01/01 TO 82/02/01	----	.31	.18	.30	.08	2.00
82/02/01 TO 82/03/01	----	.36	.15	.29	.10	----
82/03/01 TO 82/04/01	----	.69	.20	.36	.06	5.00
82/04/01 TO 82/05/04	----	1.20	.21	.17	.08	1.80
82/05/04 TO 82/06/01	----	1.10	.33	.08	.48	3.65
82/06/01 TO 82/07/01	----	1.30	.29	.07	.36	2.58
82/07/01 TO 82/08/02	----	.92	.16	.09	.31	3.40
82/08/02 TO 82/09/01	----	1.20	.24	.05	.15	3.11
82/09/01 TO 82/10/01	----	.60	.15	16.00	.07	3.93
82/10/01 TO 82/11/01	----	.69	.17	.09	.10	2.54

PERIOD OF COLLECTION	CHLORIDE (CL) (MG/L)	NITRITE+ NITRATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOSPHORUS (P) (MG/L)	SPECIFIC CONDUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/14 TO 81/11/02	.29	.28	.46	.10	10	5.64
81/11/02 TO 81/12/01	.16	.55	.57	.01	18	4.80
81/12/01 TO 82/01/01	.27	.23	.13	.01	7	5.27
82/01/01 TO 82/02/01	.51	.64	.25	.01	25	4.41
82/02/01 TO 82/03/01	.01	----	----	----	10	5.86
82/03/01 TO 82/04/01	.13	.19	.50	.02	17	5.17
82/04/01 TO 82/05/04	<.20	.28	.00	<.06	12	6.48
82/05/04 TO 82/06/01	<.20	.32	.33	<.06	17	5.91
82/06/01 TO 82/07/01	.30	.30	.12	<.06	18	4.60
82/07/01 TO 82/08/02	<.20	.19	.20	<.06	15	6.52
82/08/02 TO 82/09/01	<.20	.29	.16	<.06	13	6.00
82/09/01 TO 82/10/01	.07	.14	.57	<.06	16	5.13
82/10/01 TO 82/11/01	<.20	.48	.30	<.06	15	5.08

ST. LAWRENCE RIVER BASIN

NEAR CHAZY, NY

LOCATION.--Lat 44°53'15", long 73°28'01", Clinton County, at Cornell University meteorological station at William H. Miner Agriculture Research Institute, 0.1 mi (0.2 km) southeast of intersection of State Highway 191 and Ridge Road, and 1.4 mi (2.2 km) West of Chazy.

PERIOD OF RECORD.--November 1974 to November 1982 (monthly composite, discontinued).
October 1980 to November 1982 (storm event wetfall, discontinued).
September 1980 to November 1982 (monthly dustfall, discontinued).

EQUIPMENT.--The composite sample collector is a straight-sided polyethylene funnel approximately 6.5 in. (165 mm) in diameter which drains into a Teflon* receiving bottle. A looped plastic tubing connects the funnel with the receiving bottle to retard evaporation. The collector is heated during the cold-weather season to aid in complete collection of snow. The receiving bottle is enclosed in an insulated box. The opening for the collector is approximately 5 ft (1.5 m) above ground level.

The wetfall and dustfall sample collector is an Aerochem Metrics Model 101* wet/dry precipitation collector. An automatic sensor detects occurrences of precipitation, activating a motor which removes a cover from the wetfall collection vessel and covers the dustfall collection vessel. When precipitation ceases the cycle is reversed. The sampling vessels are polyethylene and have a collection diameter of 28.6 cm and a capacity of 13 liters. The opening of the collector is approximately 8 ft (2.5 m) above ground level.

REMARKS.--Inches of precipitation obtained from an on-site recording weighing bucket gage.

CHEMICAL ANALYSES, SEPTEMBER 1981 TO NOVEMBER 1982

MONTHLY COMPOSITE

PERIOD OF COLLECTION	INCHES OF PRECIPI- TATION	CAL- CIUM (CA) (MG/L)	MAGNE- SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS- SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/09/25 TO 81/11/04	3.85	.26	.03	.07	.04	2.20
81/11/04 TO 81/12/01	.83	.12	.01	.10	.04	2.70
81/12/01 TO 82/01/06	2.40	.51	.11	.22	.07	1.70
82/01/06 TO 82/02/04	.23	.58	.23	.51	.11	1.30
82/02/04 TO 82/03/03	.22	----	----	----	----	----
82/03/03 TO 82/04/03	1.89	1.10	.12	.46	.05	5.00
82/04/05 TO 82/05/06	1.61	.80	.15	.19	.09	3.42
82/05/06 TO 82/06/01	1.82	.99	.14	.10	.14	5.20
82/06/01 TO 82/07/01	2.25	.45	.07	.03	.27	3.32
82/07/01 TO 82/08/02	3.43	.42	.07	.02	.12	5.57
82/08/02 TO 82/09/03	3.25	.41	.05	.01	.04	3.19
82/09/03 TO 82/10/11	3.58	.14	.03	.07	.05	2.99
82/10/11 TO 82/11/04	.98	.66	.10	.13	.07	4.83

PERIOD OF COLLECTION	CHLO- RIDE (CL) (MG/L)	NIT- RITE+ NIT- RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS- PHORUS (P) (MG/L)	SPE- CIFIC CON- DUCTANCE (MICRO- (MHOS)	PH (UNITS)
81/09/25 TO 81/11/04	.17	.37	.29	.04	19	4.50
81/11/04 TO 81/12/01	.22	.49	.33	.03	21	4.45
81/12/01 TO 82/01/06	.43	.53	.42	.07	14	4.87
82/01/06 TO 82/02/04	.45	.67	.66	.06	21	4.23
82/02/04 TO 82/03/03	----	----	----	----	40	4.40
82/03/03 TO 82/04/03	.38	1.00	.63	.03	34	4.50
82/04/05 TO 82/05/06	.41	.65	.48	<.06	26	4.64
82/05/06 TO 82/06/01	.32	.55	1.00	<.06	28	4.80
82/06/01 TO 82/07/01	.26	.48	.42	<.06	30	4.35
82/07/01 TO 82/08/02	<.20	.50	.50	<.06	46	4.09
82/08/02 TO 82/09/03	<.20	.30	.25	<.06	28	4.32
82/09/03 TO 82/10/11	.26	.24	.25	<.06	25	4.35
82/10/11 TO 82/11/04	.47	.94	.48	<.06	48	4.10

* The use of the brand name in this report is for identification purposes only and does not imply endorsement by the U.S. Geological Survey.

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CHAZY, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

STORM EVENT WETFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/04	3.49	.06	.03	.07	.02	1.80
81/11/04 TO 81/12/01	.83	.09	.01	.06	.02	1.40
81/12/01 TO 82/01/06	2.40	.05	.09	.10	.04	.80
82/03/17 TO 82/04/03	1.33	.11	.08	.14	.01	2.00
82/04/05 TO 82/05/06	1.61	.15	.04	.11	.03	2.63
82/05/06 TO 82/06/01	1.82	.20	.03	.09	.04	4.73
82/06/01 TO 82/07/01	2.25	.11	.02	.03	.02	3.29
82/07/01 TO 82/08/02	3.43	.11	.03	.02	.02	5.18
82/08/02 TO 82/08/26	2.60	.10	.09	.01	.03	2.47
82/08/26 TO 82/09/03	.65	.11	.01	.03	.02	3.10
82/09/03 TO 82/10/11	3.58	.10	.04	.05	.08	2.65
82/10/11 TO 82/11/04	.98	.17	.04	.16	.02	5.15
82/11/04 TO 82/11/10	1.70	.07	.02	.10	.03	1.05

PERIOD OF COLLECTION	CHLO-RIDE (CL) (MG/L)	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/01 TO 81/11/04	.26	.30	.10	.07	17	4.42
81/11/04 TO 81/12/01	.16	.40	.19	<.01	24	4.37
81/12/01 TO 82/01/06	.44	.38	.06	.02	14	4.52
82/03/17 TO 82/04/03	.08	.31	.08	.06	24	4.30
82/04/05 TO 82/05/06	.10	.32	.22	<.06	28	4.30
82/05/06 TO 82/06/01	.33	.37	.54	<.06	36	4.26
82/06/01 TO 82/07/01	<.20	.38	.25	<.06	36	4.15
82/07/01 TO 82/08/02	<.20	.47	.32	<.06	52	3.97
82/08/02 TO 82/08/26	<.20	.17	.16	<.06	30	4.19
82/08/26 TO 82/09/03	<.20	.40	.24	<.06	42	4.08
82/09/03 TO 82/10/11	.27	.24	.14	<.06	25	4.32
82/10/11 TO 82/11/04	.36	.96	.39	<.06	55	3.98
82/11/04 TO 82/11/10	.23	.17	.11	<.06	13	4.61

CHEMICAL QUALITY OF PRECIPITATION

ST. LAWRENCE RIVER BASIN

NEAR CHAZY, NY--Continued

CHEMICAL ANALYSES, OCTOBER 1981 TO NOVEMBER 1982

MONTHLY DUSTFALL

PERIOD OF COLLECTION	INCHES OF PRECIPI-TATION	CAL-CIUM (CA) (MG/L)	MAGNE-SIUM (MG) (MG/L)	SODIUM (NA) (MG/L)	POTAS-SIUM (K) (MG/L)	SULFATE (SO4) (MG/L)
81/10/01 TO 81/11/04	----	.94	.10	.14	.09	3.40
81/11/04 TO 81/12/01	----	.21	.01	.18	.05	2.40
81/12/01 TO 82/01/06	----	.70	.16	.39	.06	2.20
82/01/06 TO 82/02/04	----	.20	.15	.32	.02	.40
82/02/04 TO 82/03/03	----	.46	.12	.39	.02	----
82/03/17 TO 82/04/03	----	.42	.04	.20	.02	5.00
82/04/03 TO 82/05/06	----	1.60	.20	.23	.46	3.00
82/05/06 TO 82/06/01	----	1.30	.34	.18	.60	2.98
82/06/01 TO 82/07/01	----	1.10	.15	.13	.61	3.29
82/07/01 TO 82/08/02	----	1.20	.33	.17	1.40	2.60
82/08/01 TO 82/09/03	----	1.00	.17	.05	.17	1.97
82/09/03 TO 82/10/11	----	.84	.10	.10	.16	3.98
82/10/11 TO 82/11/04	----	.52	.07	.15	.05	1.88

PERIOD OF COLLECTION	CHLO-RIDE (CL) (MG/L)	NIT-RITE+ NIT-RATE AS N (MG/L)	AMMONIA AS N (MG/L)	PHOS-PHORUS (P) (MG/L)	SPE-CIFIC CON-DUCTANCE (MICRO-(MHOS)	PH (UNITS)
81/10/01 TO 81/11/04	.07	.32	.44	.02	15	5.23
81/11/04 TO 81/12/01	.19	.42	.41	.02	14	4.92
81/12/01 TO 82/01/06	.41	.62	.37	.03	18	4.77
82/01/06 TO 82/02/04	.06	.37	.22	.01	9	5.16
82/02/04 TO 82/03/03	.29	.45	.55	.01	13	5.95
82/03/17 TO 82/04/03	.01	.20	.08	.01	6	5.98
82/04/03 TO 82/05/06	<.20	.42	.39	<.06	19	6.58
82/05/06 TO 82/06/01	<.20	.27	.79	<.06	22	6.60
82/06/01 TO 82/07/01	<.20	.21	1.30	.25	24	6.90
82/07/01 TO 82/08/02	.39	.22	1.80	.54	30	7.04
82/08/01 TO 82/09/03	<.20	.12	.11	<.06	12	5.34
82/09/03 TO 82/10/11	.25	.25	.57	<.06	16	5.17
82/10/11 TO 82/11/04	<.20	.23	.28	<.06	9	5.57

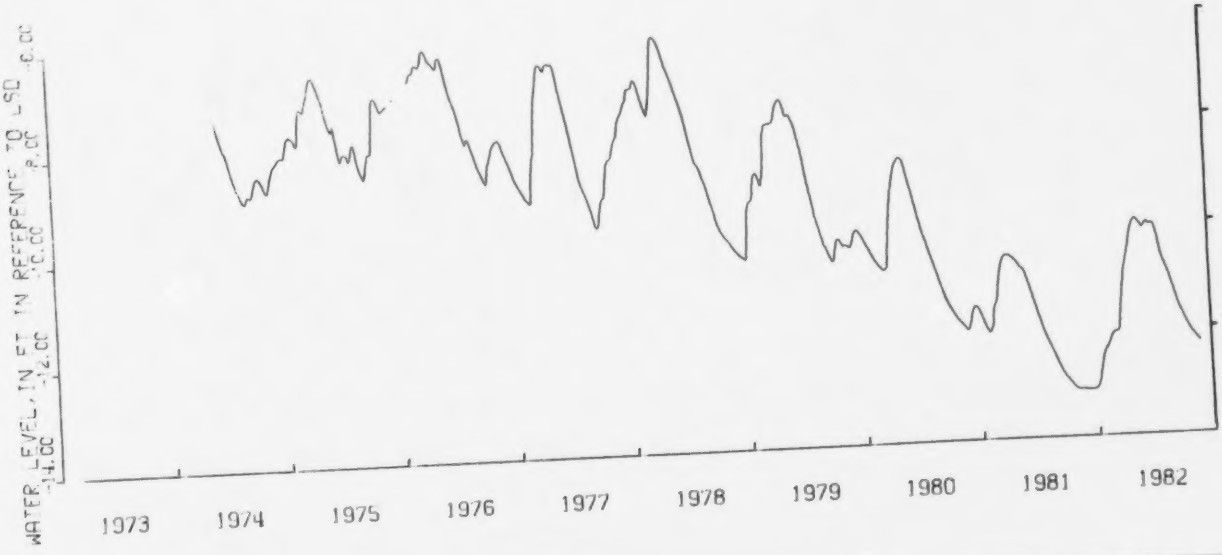
ALBANY COUNTY

424114073495402. Local number, A 636.
LOCATION.--Lat 42°41'14", long 73°49'54", Hydrologic Unit 02020006, Fuller Road, Albany.
Owner: State University of New York at Albany.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 24 ft (7.3 m), cased to 22 ft (6.7 m), 2-in. (0.05-m) jet point (60-gauze screen 22 ft or 6.7 m to 24 ft or 7.3 m). Well gravel packed from original depth of 26 ft (7.9 m).
DATUM.--Altitude of land-surface datum is 260 ft (79 m), from topographic map. Measuring point: Top of casing, 2.40 ft (0.732 m) above land-surface datum.
REMARKS.--Well was drilled May 1974 as a replacement for 424114073495401 (local number A 635), located 35 ft (10.7 m) north, which has a period of record from November 1965 to May 1974 (unpublished).
PERIOD OF RECORD.--May 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.12 ft (1.87 m) below land-surface datum, April 12, 13, 1978; lowest, 13.13 ft (4.00 m) below land-surface datum, Oct. 29, Nov. 25, 26-Dec. 17, 18, 20, 21-22, 23, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.93	13.12	13.13	13.07	12.37	12.06	10.94	10.08	10.06	10.05	10.64	11.21
2	12.94	13.12	13.13	13.06	12.36	12.06	10.91	10.06	10.07	10.05	10.66	11.22
3	12.94	13.12	13.13	13.05	12.35	12.06	10.87	10.04	10.08	10.05	10.69	11.24
4	12.95	13.12	13.13	13.03	---	12.06	10.83	10.03	10.10	10.04	10.70	11.26
5	12.96	13.12	13.13	13.01	---	12.05	10.80	10.01	10.11	10.04	10.72	11.28
6	12.97	13.12	13.13	12.99	---	12.05	10.77	10.00	10.12	10.04	10.73	11.30
7	12.97	13.12	13.13	12.96	---	12.05	10.74	9.99	10.11	10.04	10.75	11.32
8	12.98	13.12	13.13	12.93	---	12.05	10.71	9.98	10.10	10.04	10.77	11.35
9	12.99	13.12	13.13	12.89	---	12.05	10.68	9.97	10.08	10.05	10.78	11.37
10	13.00	13.12	13.13	12.85	---	12.05	10.66	9.96	10.08	10.06	10.79	11.39
11	13.00	13.12	13.13	12.82	---	12.05	10.63	9.96	10.07	10.07	10.81	11.41
12	13.02	13.12	13.13	12.78	12.21	12.04	10.61	9.95	10.07	10.09	10.83	11.43
13	13.02	13.12	13.13	12.75	12.19	12.02	10.58	9.95	10.06	10.10	10.85	11.46
14	13.03	13.12	13.13	12.71	12.18	11.98	10.55	9.95	10.05	10.12	10.86	11.48
15	13.04	13.12	13.13	12.67	12.16	11.91	10.52	9.95	10.04	10.14	10.88	11.51
16	13.05	13.12	13.13	12.64	12.15	11.84	10.49	9.95	10.03	10.16	10.90	11.53
17	13.05	13.12	13.13	12.61	12.14	11.76	10.46	9.95	10.02	10.18	10.91	11.54
18	13.06	13.12	13.13	12.58	12.13	11.70	10.43	9.95	10.01	10.20	10.93	11.56
19	13.06	13.12	13.12	12.55	12.12	11.65	10.39	9.96	10.01	10.23	10.95	11.58
20	13.07	13.12	13.12	12.52	12.11	11.59	10.36	9.96	10.01	10.26	10.97	11.60
21	13.08	13.12	13.13	12.50	12.10	11.53	10.33	9.97	10.01	10.28	10.98	11.62
22	13.08	13.12	13.13	12.48	12.09	11.47	10.30	9.98	10.01	10.31	11.00	11.64
23	13.09	13.12	13.12	12.46	12.08	11.42	10.27	10.00	10.02	10.35	11.02	11.65
24	13.09	13.12	13.12	12.44	12.08	11.36	10.24	10.00	10.02	10.38	11.05	11.66
25	13.10	13.12	13.12	12.42	12.07	11.30	10.21	10.01	10.03	10.42	11.06	11.68
26	13.10	13.13	13.12	12.41	12.07	11.24	10.18	10.01	10.04	10.45	11.09	11.69
27	13.11	13.13	13.11	12.39	12.07	11.19	10.16	10.02	10.05	10.49	11.11	11.71
28	13.11	13.13	13.10	12.38	12.06	11.14	10.14	10.03	10.06	10.53	11.13	11.72
29	13.11	13.13	13.10	12.35	---	11.09	10.12	10.04	10.06	10.56	11.15	11.73
30	13.12	13.13	13.09	12.36	---	11.04	10.10	10.05	10.06	10.59	11.17	11.75
31	13.12	---	13.08	12.36	---	10.99	---	10.06	---	10.61	11.19	---

WTR YEAR 1982 HIGHEST 9.95 May 11, 12-17, 18, 1982 LOWEST 13.13 Oct. 29, Nov. 25, 26-Dec. 18, Dec. 20, 21-22, 23, 1981



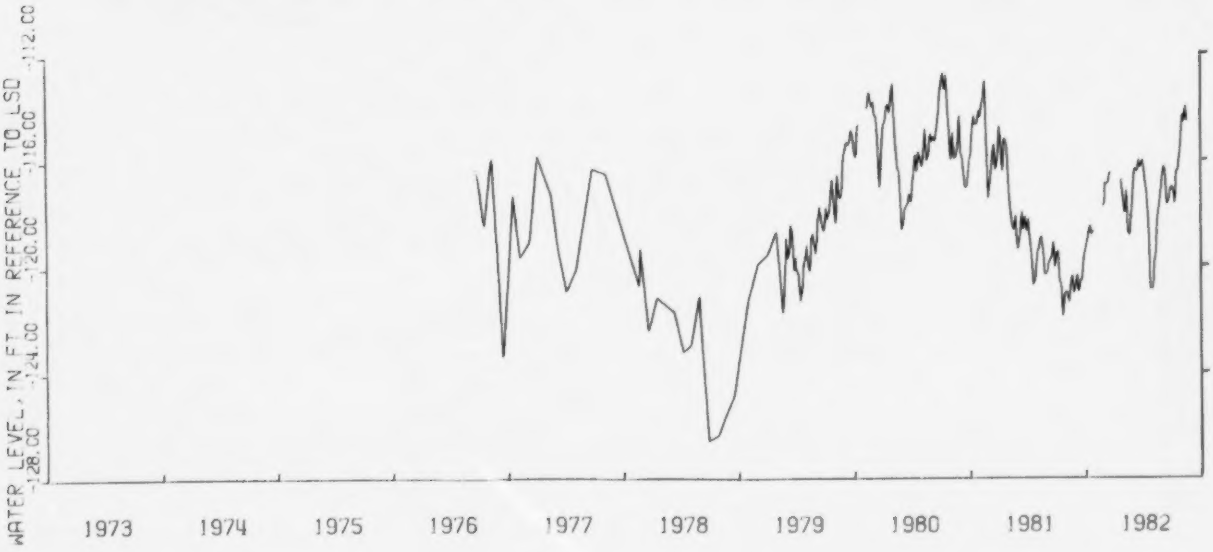
ALBANY COUNTY

424044073535101. Local number, A 637.
LOCATION.--Lat 42°40'44", long 73°53'51", Hydrologic Unit 02020006, Dr. Shaw Road, Guilderland.
Owner: Mill Hill Missionaries.
AQUIFER.--Confined aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 198 ft (60.4 m), cased to 193 ft (58.8 m), 30-slot plastic screen 193 ft (58.8 m) to 198 ft (60.4 m).
DATUM.--Altitude of land-surface datum is 220 ft (67 m), from topographic map. Measuring point: Top of casing, 3.50 ft (1.067 m) above land-surface datum.
REMARKS.--Water level affected by pumping from distant municipal well field.
PERIOD OF RECORD.--September 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 112.10 ft (34.17 m) below land-surface datum, Oct. 11, 1980; lowest measured, 126.55 ft (38.57 m) below land-surface datum, September 27, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119.48	120.97	120.58	---	---	117.61	---	117.52	116.93	115.98	120.86	---
2	119.24	121.15	120.33	---	---	117.37	116.51	117.87	116.73	115.92	120.57	116.00
3	119.22	121.21	120.24	---	---	117.44	116.45	117.90	116.82	115.83	120.38	115.93
4	119.67	121.37	120.50	---	---	117.28	---	118.02	116.77	115.88	120.03	116.23
5	119.42	121.04	120.30	---	---	116.84	---	117.99	116.46	116.20	119.86	116.25
6	118.90	120.62	120.35	---	---	116.92	---	117.31	116.17	116.25	119.81	116.06
7	118.50	120.80	120.63	---	---	116.39	---	117.32	116.08	116.68	120.04	116.11
8	119.27	120.96	120.74	---	---	116.77	---	117.48	116.03	116.47	119.73	116.04
9	120.19	121.43	120.69	---	---	117.02	---	117.23	116.09	116.51	119.64	116.14
10	120.61	121.37	120.97	---	---	116.90	---	117.14	116.30	116.74	119.44	116.40
11	120.84	121.32	120.95	---	119.54	116.68	---	117.93	116.29	116.54	119.47	116.52
12	120.72	122.03	121.30	118.54	119.66	116.50	---	118.10	116.57	116.40	119.30	117.29
13	120.98	121.80	121.21	118.50	---	116.43	---	118.26	116.35	116.60	118.94	117.45
14	121.12	121.24	121.15	118.46	---	116.39	---	118.56	116.10	116.72	118.64	117.34
15	120.62	120.56	120.50	118.46	---	116.86	---	118.66	116.44	117.37	118.31	117.69
16	120.71	120.59	120.33	118.46	---	116.63	---	118.36	116.20	117.44	118.03	117.61
17	121.27	120.83	120.50	118.46	---	116.47	---	118.25	116.54	117.96	---	117.61
18	121.23	120.51	120.35	118.46	---	116.56	---	118.61	116.63	117.91	---	117.26
19	121.46	120.74	120.14	118.83	---	116.57	---	118.77	116.18	118.38	---	117.71
20	121.88	120.35	120.54	118.83	---	116.46	---	118.85	115.98	118.36	---	117.56
21	121.79	120.24	120.41	119.50	---	116.48	---	119.31	115.85	118.45	---	117.67
22	121.38	120.34	120.28	119.79	---	116.34	---	119.44	116.10	118.94	---	117.63
23	120.95	120.86	119.87	119.66	---	116.65	---	119.14	116.23	119.59	---	117.37
24	120.86	121.12	119.93	---	---	116.52	---	118.60	116.42	120.29	---	117.24
25	121.02	121.00	119.68	---	---	116.50	116.77	118.09	116.29	120.87	---	117.10
26	120.47	121.19	119.38	---	---	116.50	117.40	117.78	116.50	121.41	---	117.39
27	119.97	120.54	118.88	---	---	116.56	117.40	117.59	116.29	121.42	---	116.94
28	120.27	120.70	118.70	---	---	116.77	117.54	117.64	115.99	121.26	---	116.88
29	120.81	121.12	118.54	---	---	---	117.48	117.71	115.81	121.10	---	116.99
30	120.75	121.02	118.71	---	---	---	117.61	117.42	115.67	121.06	---	117.48
31	121.24	---	118.58	---	---	---	---	117.21	---	120.73	---	---

WTR YEAR 1982 HIGHEST 115.57 June 30, 1982 LOWEST 122.12 Nov. 12, 1981

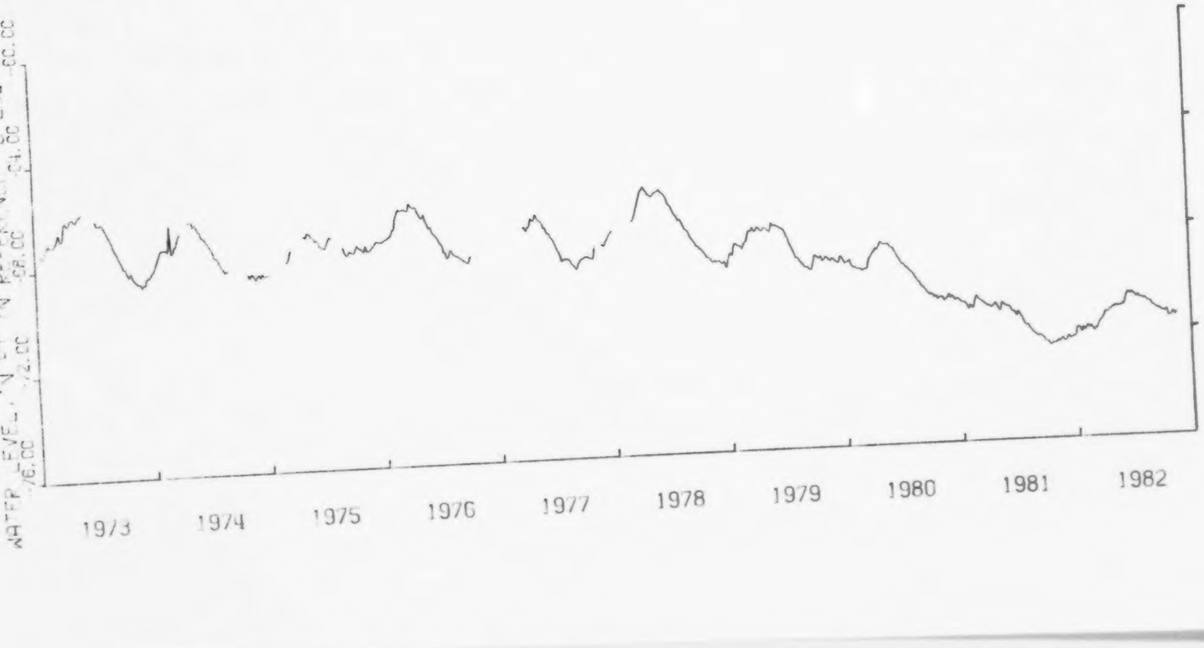


414737073563301. Local number, Du 321.
LOCATION.--Lat 41°47'37", long 73°56'33", Hydrologic Unit 02020008, near Hyde Park.
Owner: U.S. National Park Service.
AQUIFER.--Confined aquifer in shale of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 128 ft (39.0 m), cased to unknown depth, open hole.
DATUM.--Altitude of land-surface datum is 170 ft (52 m), from topographic map. Measuring point: Top of extended casing, 3.10 ft (0.944 m) above land-surface datum.
REMARKS.--Water level responds to semidiurnal earth tides (approximately 0.05 ft or 0.015 m).
PERIOD OF RECORD.--September 1948 to April 1950, April 1953 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.62 ft (20.00 m) below land-surface datum, June 22, 1953; lowest, 73.85 ft (22.51 m) below land-surface datum, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72.34	72.41	72.36	72.20	71.99	72.03	71.47	71.11	71.01	70.58	70.82	71.12
2	72.26	72.34	72.22	72.14	72.05	71.92	71.45	71.09	71.00	70.65	70.83	71.05
3	72.25	72.32	72.17	72.17	71.97	71.91	71.42	71.10	71.04	70.66	70.84	71.01
4	72.31	72.31	72.19	72.06	71.81	71.94	71.27	71.11	71.10	70.65	70.86	71.04
5	72.35	72.31	72.22	71.86	71.84	71.89	71.29	71.13	71.07	70.68	70.88	71.12
6	72.35	72.22	72.19	71.87	71.81	71.92	71.27	71.13	70.87	70.73	70.92	71.16
7	72.32	72.15	72.17	71.88	71.82	71.88	71.24	71.10	70.71	70.75	70.95	71.19
8	72.33	72.20	72.14	71.92	71.83	71.84	71.30	71.09	70.70	70.72	70.94	71.22
9	72.39	72.30	72.13	71.89	71.81	71.91	71.32	71.07	70.73	70.70	70.87	71.23
10	72.46	72.38	72.15	71.85	71.78	71.95	71.33	71.07	70.76	70.71	70.83	71.21
11	72.50	72.38	72.19	71.86	71.84	71.93	71.33	71.10	70.78	70.72	70.87	71.20
12	72.53	72.39	72.27	71.94	71.90	71.86	71.31	71.11	70.80	70.71	70.90	71.21
13	72.55	72.41	72.34	72.01	71.90	71.78	71.29	71.11	70.80	70.73	70.92	71.25
14	72.54	72.38	72.35	71.94	71.90	71.72	71.26	71.12	70.70	70.77	70.93	71.26
15	72.50	72.30	72.27	71.87	71.91	71.73	71.31	71.13	70.64	70.80	70.94	71.24
16	72.43	72.23	72.14	71.90	71.88	71.76	71.35	71.13	70.60	70.81	70.95	71.20
17	72.41	72.20	72.18	71.94	71.90	71.70	71.33	71.13	70.57	70.80	70.94	71.20
18	72.39	72.18	72.20	72.02	71.93	71.67	71.22	71.14	70.59	70.78	70.94	71.20
19	72.33	72.22	72.21	72.07	71.90	71.63	71.21	71.12	70.60	70.75	70.97	71.22
20	72.39	72.22	72.24	72.07	71.81	71.62	71.21	71.08	70.59	70.71	70.97	71.25
21	72.44	72.18	72.28	72.08	71.77	71.58	71.20	71.08	70.62	70.71	70.94	71.27
22	72.46	72.23	72.26	72.13	71.77	71.51	71.22	71.14	70.63	70.74	70.98	71.29
23	72.43	72.30	72.19	72.08	71.83	71.52	71.23	71.17	70.62	70.77	71.00	71.27
24	72.38	72.34	72.17	71.89	71.88	71.57	71.21	71.15	70.65	70.80	71.00	71.26
25	72.42	72.35	72.19	71.87	71.95	71.58	71.20	71.10	70.69	70.83	70.97	71.28
26	72.40	72.37	72.21	71.93	72.03	71.50	71.19	71.07	70.69	70.83	70.96	71.30
27	72.34	72.32	72.18	72.04	72.05	71.50	71.10	71.08	70.69	70.83	71.00	71.27
28	72.25	72.29	72.15	72.06	72.06	71.58	71.09	71.10	70.68	70.79	71.02	71.26
29	72.31	72.30	72.16	72.08	---	71.65	71.13	71.06	70.61	70.76	71.07	71.31
30	72.38	72.33	72.22	72.10	---	71.67	71.14	71.02	70.54	70.81	71.13	71.37
31	72.43	---	72.27	72.07	---	71.61	---	71.01	---	70.83	71.14	---

WTR YEAR 1982 HIGHEST 70.52 Jun. 30, 1982 LOWEST 72.60 Oct. 14, 1981

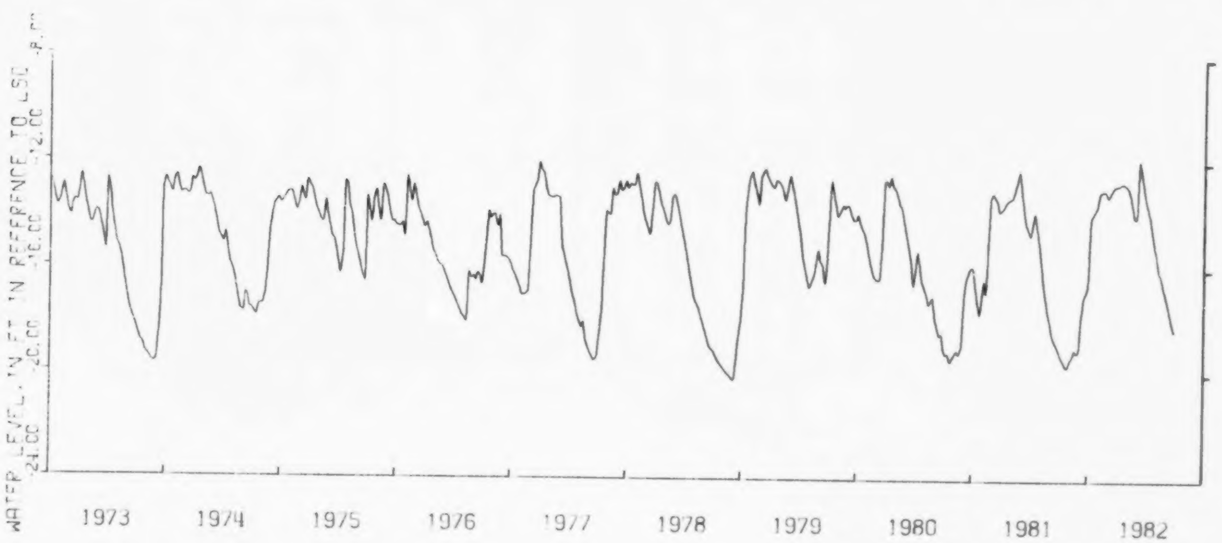


DUTCHESS COUNTY

414128073475201. Local number, Du 1009.
LOCATION.--Lat 41°41'28", long 73°47'52", Hydrologic Unit 02020008, James Baird State Park, near Pleasant Valley.
Owner: New York State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 28 ft (8.5 m) in July 1979 (previously reported as 27 ft or 8.2 m), cased to 25 ft (7.6 m), 1.25-in. (0.03-m) well point (60-gauze screen 25 ft or 7.6 m to 27 ft or 8.2 m).
DATUM.--Altitude of land-surface datum is 330 ft (101 m), from topographic map. Measuring point: Top of casing, 2.10 ft (0.640 m) above land-surface datum.
PERIOD OF RECORD.--October 1965 to April 1969, June 1971 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.84 ft (3.61 m) below land-surface datum, June 8, 1982; lowest measured, 20.60 ft (6.28 m) below land-surface datum, Nov. 24, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	19.32	DEC 28, 1981	16.63	APR 05, 1982	12.77	JUL 26, 1982	15.09
12	19.49	JAN 05, 1982	14.06	12	12.70	AUG 02	15.43
19	19.67	12	13.89	19	12.72	09	16.07
26	19.72	19	13.76	MAY 04	12.90	16	16.22
NOV 02	19.42	26	13.61	10	13.15	23	16.69
10	19.28	FEB 02	13.06	17	13.60	30	16.97
16	19.03	15	13.00	24	14.05	SEP 06	17.26
23	19.17	22	13.06	31	14.05	13	17.64
30	19.11	MAR 02	13.28	JUN 08	11.84	22	18.12
DEC 07	17.89	08	13.08	15	12.28	27	18.32
15	17.05	15	12.93	28	13.32		
21	16.89	22	12.81	JUL 12	14.05		



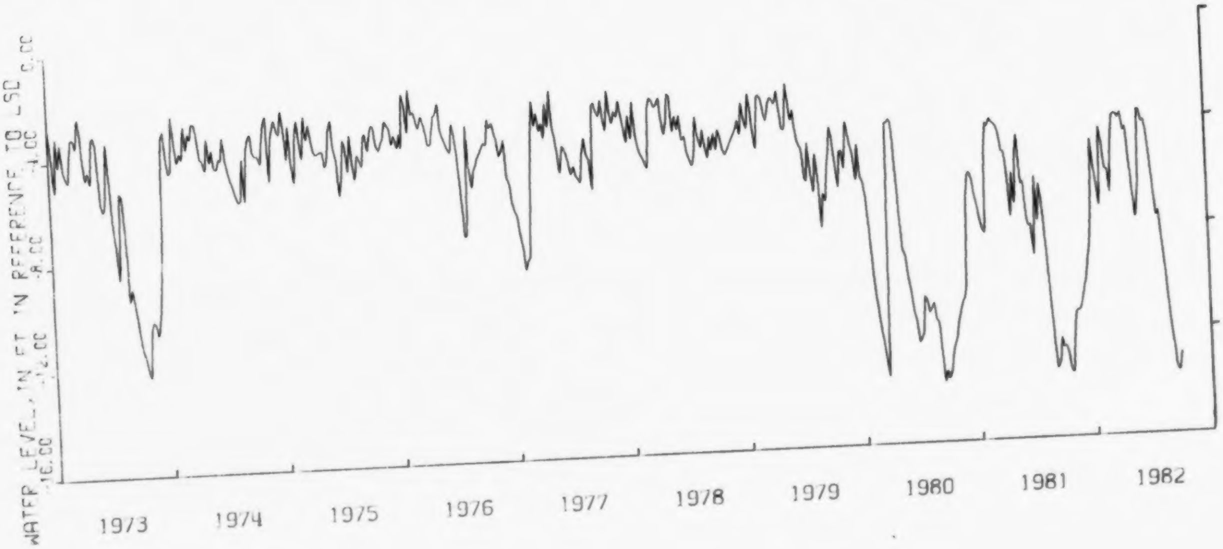
GROUND-WATER LEVELS

GREENE COUNTY

422319073482001. Local number, G 1.
LOCATION.--Lat 42°23'19", long 73°48'20", Hydrologic Unit 02020006, near West Coxsackie.
Owner: Harry Andrews.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 18 ft (5.5 m) in August 1979 (previously reported as 19 ft or 5.8 m), tile-lined to 2 ft (0.6 m), stone-lined to 19 ft (5.8 m).
DATUM.--Altitude of land-surface datum is 130 ft (40 m), from topographic map. Measuring point: Chiseled square on top of inner step on curb, 0.18 ft (0.055 m) below land-surface datum.
PERIOD OF RECORD.--December 1945 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 1.07 ft (0.33 m) below land-surface datum, Mar. 15, 1962, lowest measured 15.56 ft (4.74 m) below land-surface datum, Feb. 27, 1963.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1981	12.58	JAN 01, 1982	7.34	APR 02, 1982	3.88	JUL 05, 1982	4.64
08	12.83	07	4.82	09	4.05	12	5.89
16	13.52	16	5.98	16	3.82	19	7.01
23	13.62	22	6.56	23	4.54	26	7.80
29	12.14	29	7.35	30	4.37	AUG 02	7.61
NOV 05	11.33	FEB 05	4.35	MAY 07	5.66	09	8.70
12	11.26	12	5.00	14	6.77	16	9.80
19	11.24	19	5.96	22	7.85	23	10.92
28	10.78	27	6.01	JUN 01	6.43	31	12.23
DEC 03	10.42	MAR 05	6.88	07	3.74	SEP 07	12.83
10	10.08	12	5.07	14	3.80	13	13.55
17	9.43	19	3.94	21	4.24	21	13.72
24	8.74	26	3.88	28	4.13	28	13.01



GROUND-WATER LEVELS

HAMILTON COUNTY

432832074122201. Local number, H 3.

LOCATION.--Lat 43°28'32", long 74°12'22", Hydrologic Unit 02020002, near Griffin.
Owner: F. B. Girard.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 15.2 ft (4.63 m) as of June 1981, filled in from original depth of 19 ft (5.8 m), cased to 16 ft (4.9 m), 1.25-in. (0.03-m) well point (60-gauze screen 16 ft or 4.9 m to 19 ft or 5.8 m, damaged during well installation).

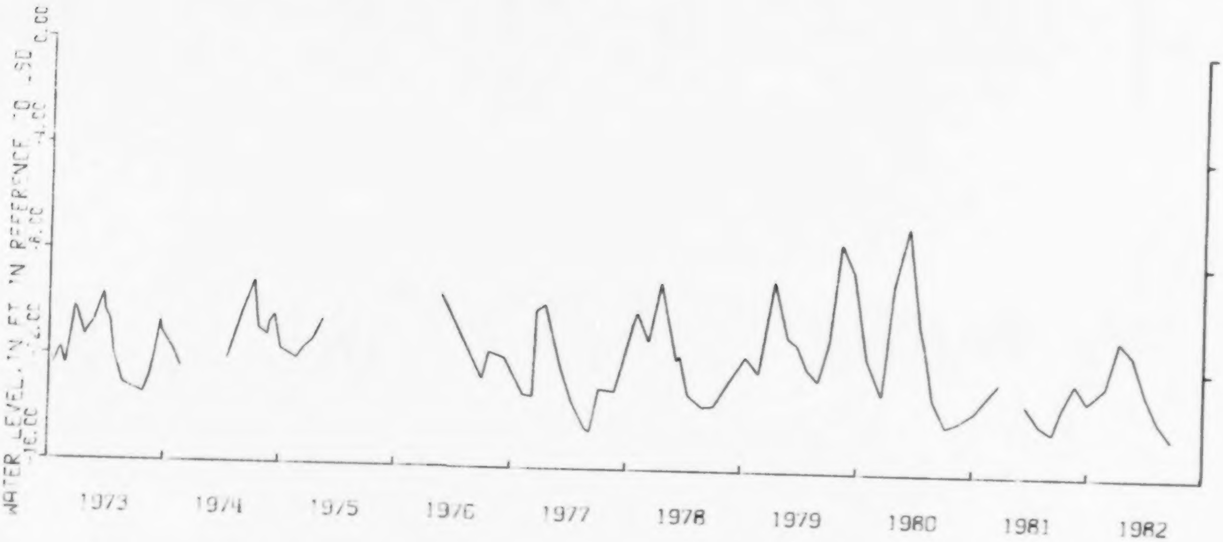
DATUM.--Altitude of land-surface datum is 1,290 ft (393 m), from topographic map. Measuring point: Top of casing, 2.30 ft (0.701 m) above land-surface datum.

PERIOD OF RECORD.--November 1965 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.63 ft (2.02 m) below land-surface datum, June 6, 1980; lowest measured, 15.44 ft (4.71 m) below land-surface datum, Oct. 21, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1981	13.43	FEB 23, 1982	12.56	MAY 18, 1982	11.38	AUG 09, 1982	13.87
NOV 18	12.47	APR 05	10.83	JUN 28	12.81	SEP 20	14.53
DEC 28	13.18						

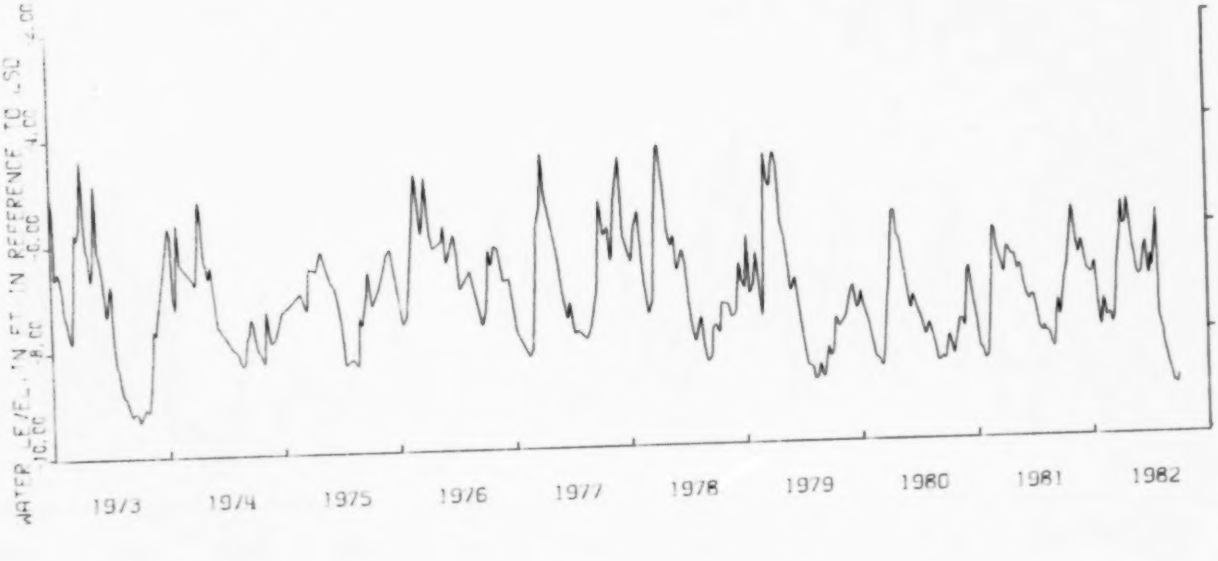


MONTGOMERY COUNTY

430141074423501. Local number, Mt 1.
LOCATION.--Lat 43°01'41", long 74°42'35", Hydrologic Unit 02020004, near St. Johnsville.
Owner: Keith Handy.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 24 in. (0.61 m), depth 12 ft (3.7 m), stone-lined.
DATUM.--Altitude of land-surface datum is 710 ft (216 m), from topographic map. Measuring point: Top edge of limestone slab at northeast corner of well opening, at land-surface datum.
PERIOD OF RECORD.--October 1942 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.74 ft (1.14 m) below land-surface datum, Apr. 10, 1971; lowest measured 9.99 ft (3.04 m) below land-surface datum, Aug. 28, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	6.97	FEB 06, 1982	7.42	MAY 08, 1982	6.38	JUL 31, 1982	7.77
12	6.82	16	7.77	15	6.63	AUG 12	8.10
31	5.67	27	7.72	22	6.95	14	8.28
NOV 13	6.36	MAR 06	7.92	29	7.02	23	8.53
20	6.58	13	7.68	JUN 05	6.97	28	8.68
28	6.32	20	6.81	12	6.55	SEP 04	8.83
DEC 05	6.51	29	6.24	20	6.38	13	9.06
14	6.87	APR 05	5.60	29	7.02	18	9.03
30	6.96	10	6.05	JUL 06	6.64	22	9.10
JAN 09, 1982	6.74	17	6.02	10	6.86	25	8.93
21	7.57	24	5.56	17	6.35		
29	7.96	MAY 01	5.94	24	5.77		

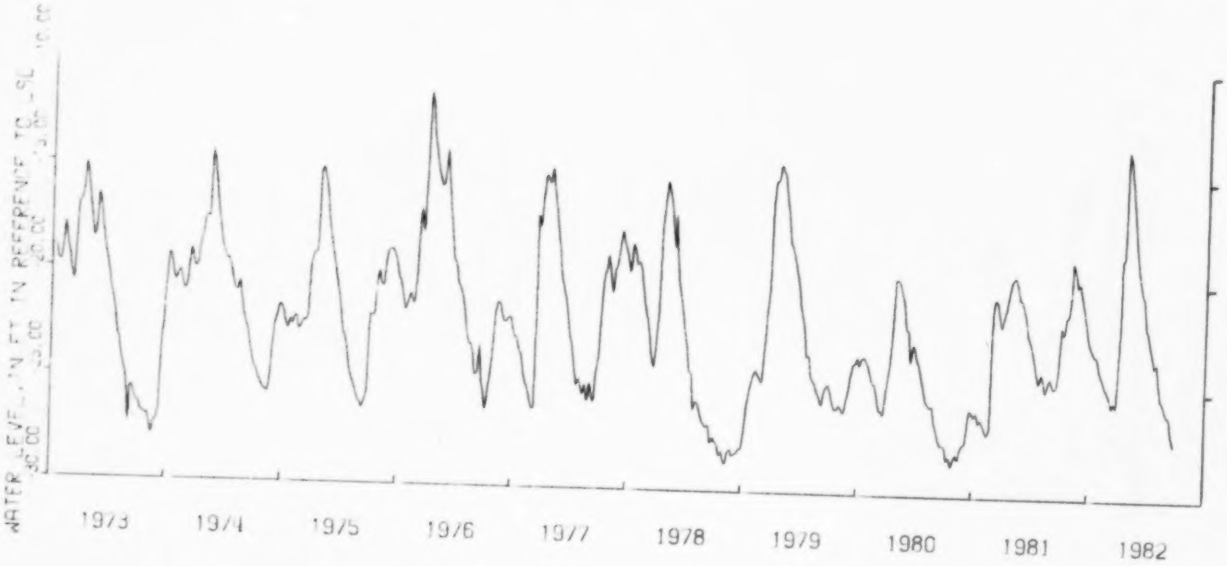


ONEIDA COUNTY

433112075091501. Local number, Oe 151.
LOCATION.--Lat 43°31'12", long 75°09'15", Hydrologic Unit 04150101, at Woodgate.
Owner: Henry Rubyor.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Dug domestic well, diameter 36 in. (0.91 m), depth 31 ft (9.4 m), stone-lined.
DATUM.--Land-surface datum is 1,484.94 ft (452.609 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of 2-ft (0.6-m) square concrete well cover at midpoint of south side of rectangular opening, 1.00 ft (0.305 m) above land-surface datum.
PERIOD OF RECORD.--July 1926 to August 1945, October 1948 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 11.43 ft (3.48 m) below land-surface datum, Apr. 3, 1976; lowest measured 30.31 ft (9.24 m) below land-surface datum, Feb. 25, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1981	21.91	JAN 09, 1982	23.00	APR 10, 1982	18.58	JUL 10, 1982	22.60
10	22.22	16	23.20	17	18.56	17	23.21
17	21.41	23	23.25	24	13.43	24	23.70
24	21.38	30	23.85	MAY 01	13.86	31	23.50
31	20.65	FEB 06	24.15	08	15.01	AUG 07	24.45
NOV 07	18.80	13	24.40	15	16.16	14	25.20
14	19.24	20	24.72	22	17.32	21	25.40
21	19.94	27	24.93	29	18.58	28	25.75
28	19.79	MAR 06	25.20	JUN 05	19.40	SEP 04	25.97
DEC 05	20.39	13	25.63	12	20.26	11	26.03
12	20.90	20	25.36	19	20.45	18	26.86
26	22.40	27	25.63	26	21.80	25	27.35
JAN 02, 1982	22.75	APR 03	22.84	JUL 03	22.04		



GROUND-WATER LEVELS

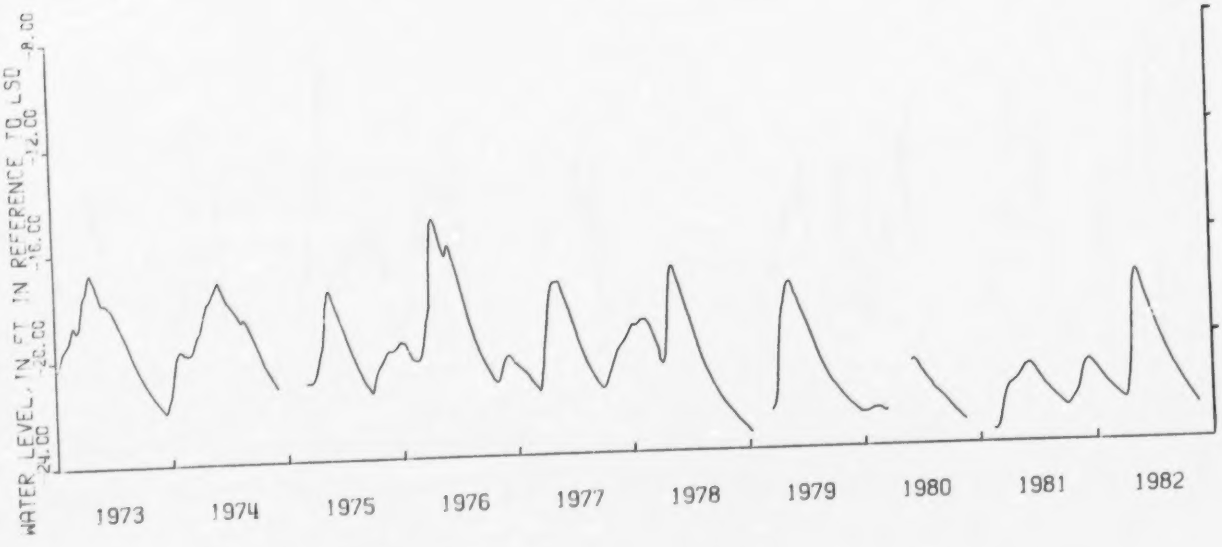
ONEIDA COUNTY

433012075134202. Local number, Oe 766.
LOCATION.--Lat 43°30'12", long 75°13'42", Hydrologic Unit 04150101, near Hawkinsville.
Owner: New York State Department of Environmental Conservation.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Driven-washed observation well, diameter 6 in. (0.15 m), depth 31 ft (9.4 m), filled in from original depth of 33 ft (10.1 m), cased to 33 ft (10.1 m), open end.
DATUM.--Land-surface datum is 1,190.22 ft (362.779 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of extended casing, 2.63 ft (0.802 m) above land-surface datum.
REMARKS.--Well was driven-washed November 1968 as a replacement for 433012075134201 (local number Oe 765), located 15 ft (4.6 m) east, which has a period of record from November 1965 to November 1968 (unpublished).
PERIOD OF RECORD.--November 1968 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.87 ft (4.53 m) below land-surface datum, May 21, 1972; lowest recorded, 23.58 ft (7.80 m) below land-surface datum, Feb. 20, 21, 22, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.70	22.20	21.05	21.27	21.78	22.14	22.47	18.21	18.29	19.37	20.40	21.24
2	22.69	22.18	21.03	21.31	21.81	22.15	22.48	18.09	18.34	19.40	20.43	21.25
3	22.69	22.17	21.03	21.33	21.81	22.17	22.46	17.99	18.39	19.43	20.46	21.27
4	22.69	22.15	21.02	21.31	21.83	22.17	22.46	17.91	18.43	19.47	20.49	21.30
5	22.69	22.12	21.01	21.33	21.85	22.18	22.46	17.85	18.46	19.51	20.53	21.33
6	22.67	22.09	21.00	21.37	21.85	22.20	22.42	17.78	18.49	19.55	20.56	21.35
7	22.64	22.06	20.99	21.38	21.86	22.20	22.38	17.73	18.53	19.58	20.59	21.38
8	22.64	22.03	20.98	21.41	21.88	22.22	22.31	17.69	18.56	19.62	20.61	21.40
9	22.64	21.98	20.98	21.41	21.89	22.23	22.22	17.67	18.59	19.65	20.63	21.42
10	22.61	21.93	20.98	21.42	21.90	22.24	22.13	17.66	18.63	19.68	20.66	21.44
11	22.59	21.89	20.99	21.44	21.91	22.25	22.03	17.66	18.67	19.71	20.69	21.46
12	22.57	21.85	21.01	21.48	21.93	22.26	21.93	17.65	18.71	19.74	20.72	21.48
13	22.55	21.78	21.02	21.49	21.93	22.27	21.83	17.65	18.74	19.79	20.75	21.50
14	22.53	21.72	21.02	21.49	21.95	22.28	21.74	17.66	18.77	19.83	20.78	21.52
15	22.51	21.65	21.02	21.50	21.96	22.30	21.63	17.68	18.80	19.86	20.81	21.54
16	22.48	21.58	21.03	21.52	21.98	22.31	21.51	17.69	18.82	19.89	20.83	21.56
17	22.46	21.52	21.05	21.55	21.99	22.32	21.40	17.72	18.86	19.92	20.85	21.59
18	22.43	21.47	21.06	21.57	22.00	22.34	21.29	17.75	18.91	19.95	20.88	21.61
19	22.42	21.43	21.06	21.59	22.01	22.34	21.18	17.77	18.93	19.98	20.91	21.64
20	22.42	21.37	21.08	21.61	22.02	22.36	21.07	17.79	18.97	20.01	20.93	21.66
21	22.40	21.32	21.09	21.63	22.03	22.36	20.95	17.87	19.00	20.05	20.96	21.68
22	22.38	21.28	21.09	21.65	22.05	22.37	20.75	17.92	19.05	20.08	20.99	21.70
23	22.36	21.25	21.10	21.64	22.07	22.39	20.45	17.97	19.08	20.12	21.01	21.72
24	22.35	21.22	21.14	21.63	22.08	22.40	20.07	17.99	19.13	20.16	21.04	21.75
25	22.33	21.18	21.16	21.67	22.10	22.41	19.69	18.03	19.16	20.18	21.06	21.77
26	22.30	21.15	21.18	21.70	22.11	22.41	19.32	18.07	19.20	20.21	21.09	21.79
27	22.28	21.12	21.19	21.72	22.12	22.43	19.01	18.11	19.23	20.25	21.11	21.81
28	22.27	21.09	21.21	21.72	22.14	22.45	18.75	18.15	19.26	20.26	21.14	21.84
29	22.26	21.08	21.23	21.75	---	22.45	18.56	18.18	19.28	20.30	21.17	21.86
30	22.24	21.06	21.26	21.76	---	22.46	18.37	18.21	19.32	20.35	21.20	21.88
31	22.23	---	21.28	21.77	---	22.46	---	18.25	---	20.37	21.22	---

WTR YEAR 1982 HIGHEST 17.65 May 11, 12, 13, 1982 LOWEST 22.70 Oct. 1, 1981



ORANGE COUNTY

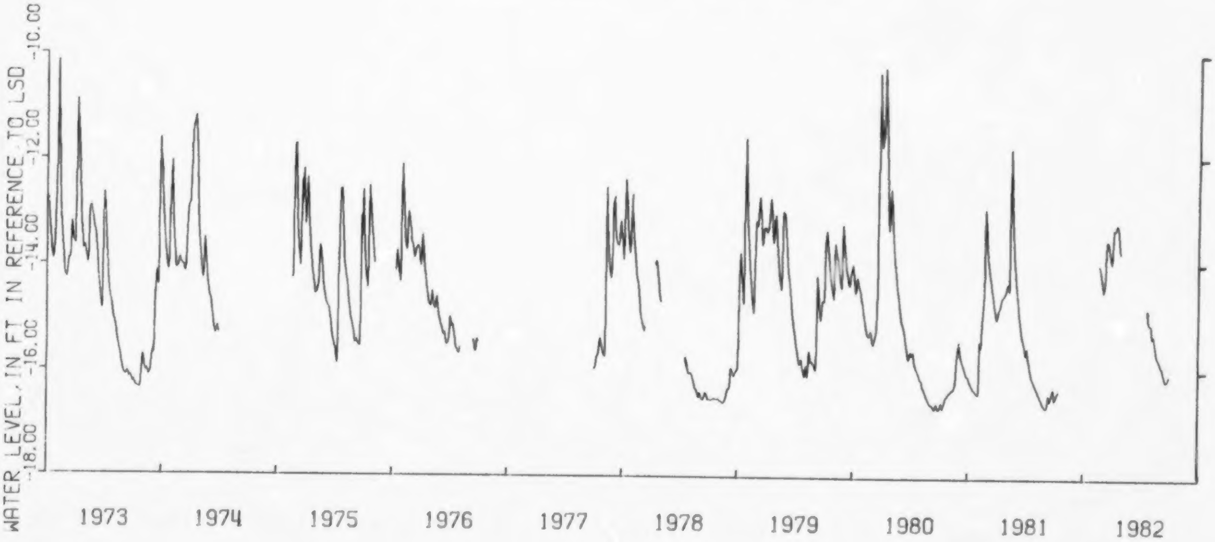
411933074150801. Local number, O 104.
LOCATION.--Lat 41°19'33", long 74°15'08", Hydrologic Unit 02020008, near Chester.
Owner: Palisades Interstate Park Commission.
AQUIFER.--Water-table aquifer in limestone of Devonian age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 70 ft (21.3 m) in October 1979 (previously reported as 98 ft or 29.9 m), cased to 73 ft (22.3 m), open end.
DATUM.--Altitude of land-surface datum is 445 ft (136 m), from topographic map. Measuring point: Top of extended casing, 4.49 ft (1.369 m) above land-surface datum.
REMARKS.--Water-level fluctuations show hydraulic response to high flow in Seeley Brook, 500 ft (152 m) west.
PERIOD OF RECORD.--September 1964 to June 1974, February 1975 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.59 ft (2.92 m) below land-surface datum, Apr. 5, 1970; lowest, 17.50 ft (5.33 m) below land-surface datum, Oct. 26, 1976.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.50	---			---	14.30	13.92	13.77		---	15.07	15.84
2	16.35	---			---	14.33	13.99	13.82		---	15.12	15.84
3	16.33	---			---	14.36	13.99	13.80		---	15.20	15.83
4	16.37	---			---	14.42	13.41	13.85		---	15.27	15.86
5	16.41	---			---	14.45	13.25	13.85		---	15.32	15.90
6	16.42	15.95			---	14.45	13.14	13.85		---	15.37	15.93
7	16.41	15.90			---	14.45	13.11	---		---	15.41	15.96
8	---	15.92			---	14.25	13.17	---		---	15.45	15.99
9	---	15.95			---	14.12	13.22	---		---	15.33	16.01
10	---	15.98			---	14.15	13.28	---		---	15.26	16.03
11	---	15.99			---	14.18	13.18	---		---	15.32	16.05
12	---	16.01			---	14.11	13.11	---		---	15.37	16.08
13	---	16.02			---	13.81	13.02	14.54		---	15.41	16.10
14	---	---	15.54 S		---	13.57	13.01	14.59		---	15.46	16.12
15	---	---			---	13.48	13.15	---		---	15.50	16.13
16	---	---			---	13.47	13.19	---		---	15.54	16.09
17	---	---			---	13.50	13.21	---		14.75	15.57	16.05
18	---	---			---	13.50	13.08	---		14.82	15.60	16.08
19	---	---			13.91	13.51	13.14	---		14.88	15.64	16.12
20	---	---			13.93	13.49	13.21	---		14.77	15.68	16.13
21	---	---			13.90	13.51	13.29	---		14.71	15.72	16.10
22	---	---			13.95	13.51	13.39	---		14.82	15.76	16.08
23	---	---			13.99	13.55	13.47	---		14.90	15.79	16.02
24	---	---			14.03	13.61	13.54	---		14.97	15.81	15.98
25	---	---			14.08	13.69	13.62	---		15.04	15.72	16.02
26	---	---			14.16	13.71	13.68	---		15.10	15.58	16.05
27	---	---			14.21	13.69	13.59	---		15.16	15.63	16.04
28	---	---		14.89 S	14.26	13.77	13.59	---		15.19	15.69	16.02
29	---	---			---	13.84	13.64	---		15.22	15.74	16.05
30	---	---			---	13.89	13.71	---		15.28	15.78	16.06
31	---	---			---	13.92	---	---		15.31	15.81	---

S Steel tape measurement.

WTR YEAR 1982 HIGHEST 12.94 Apr. 14, 1982 LOWEST 16.56 Oct. 1, 1981

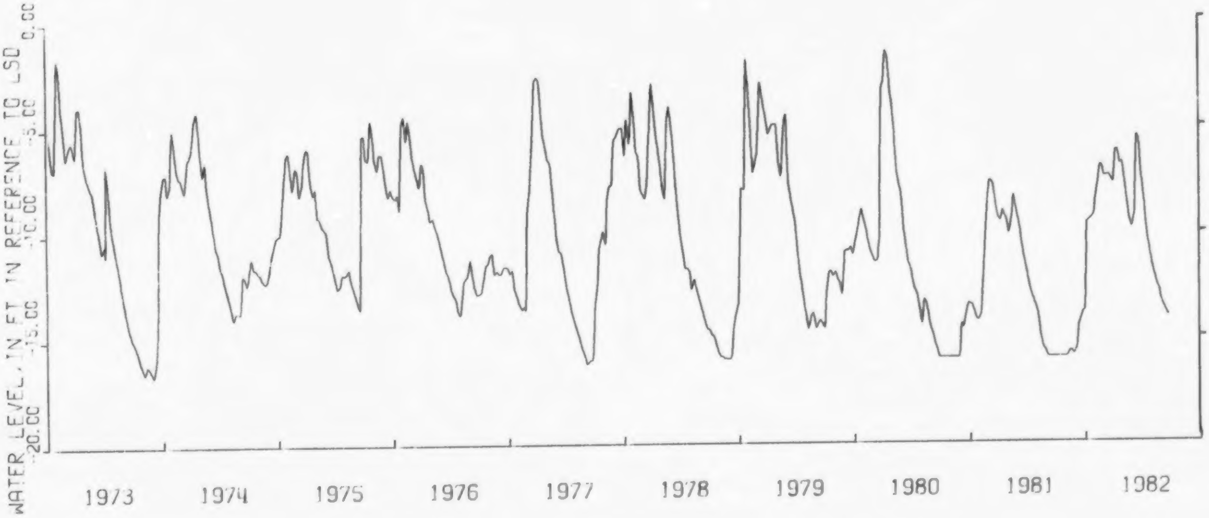


PUTNAM COUNTY

412450073413101. Local number, P 609.
LOCATION.--Lat 41°24'50", long 73°41'31", Hydrologic Unit 02030101, near Carmel.
Owner: New York City Board of Water Supply.
AQUIFER.--Water-table aquifer in till of Pleistocene age.
WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth 16 ft (4.9 m), stone-lined.
DATUM.--Altitude of land-surface datum is 540 ft (165 m), from topographic map. Measuring point: Top (north side) of 3-in. (0.08-m) coupling set in concrete well cover, at land-surface datum.
REMARKS.--Original depth measured at 17 ft (5.2 m). Depth measured at 16.6 ft (5.06 m) October 1979, filled in to 16 ft (4.9 m) September 1981.
PERIOD OF RECORD.--January 1935 to September 1945, September 1950 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.0 ft (0.30 m) below land-surface datum, Oct. 19, 1955; lowest measured, dry Nov. 1, 30, 1935, Jan. 7, 1936, Sept. 1, 1939, several days in 1953, 1957, 1964, 1966, 1978, Sept. 25, 1980, several days in 1981, 1982.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1981	DRY	JAN 07, 1982	9.60	APR 16, 1982	6.20	JUL 21, 1982	10.60
09	DRY	15	9.50	23	6.90	31	11.55
16	DRY	28	9.30	30	6.75	AUG 04	11.80
23	DRY	FEB 04	8.40	MAY 07	7.50	11	12.30
30	DRY	12	7.70	14	8.50	18	12.70
NOV 06	15.95	19	6.90	22	9.50	23	12.80
13	15.70	26	7.00	31	9.90	29	13.30
20	15.75	MAR 05	7.50	JUN 07	9.15	SEP 08	13.70
27	15.90	12	7.40	15	5.50	14	13.90
DEC 04	15.60	18	7.40	22	5.80	21	14.10
11	14.50	26	7.60	30	7.30		
24	13.90	APR 02	7.80	JUL 07	8.55		
31	13.80	09	6.20	14	9.80		



RENSSELAER COUNTY

423834073391001. Local number, Re 700.

LOCATION.--Lat 42°38'34", long 73°39'10", Hydrologic Unit 02020006, near Defreestville.
Owner: William P. Hofmann.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Dug domestic well, diameter 4 ft (1.2 m), depth 16 ft (4.9 m), stone-lined.

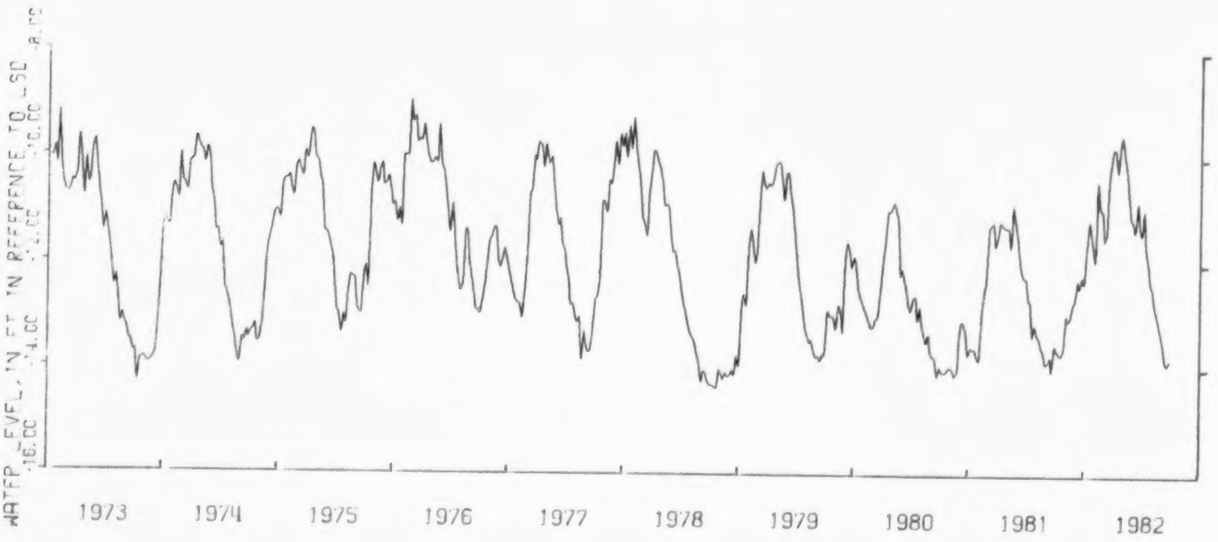
DATUM.--Altitude of land-surface datum is 405 ft (123 m), from topographic map. Measuring point: Top edge of concrete curbing at midpoint of north side of rectangular opening, 2.00 ft (0.609 m) above land-surface datum.

PERIOD OF RECORD.--September 1954 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 8.92 ft (2.72 m) below land-surface datum, Apr. 4, 1970; lowest measured 15.49 ft (4.72 m) below land-surface datum, Oct. 3, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1981	13.63	JAN 02, 1982	11.80	APR 04, 1982	9.84	JUL 03, 1982	10.95
10	13.69	10	11.17	11	10.26	10	11.68
17	13.72	17	11.40	17	9.76	17	12.00
24	13.60	23	11.65	24	9.55	24	12.38
NOV 01	12.95	30	11.95	MAY 02	9.95	31	12.45
07	13.07	FEB 06	10.42	08	10.19	AUG 07	12.77
14	13.00	13	10.92	17	10.80	16	13.00
22	12.76	22	11.04	22	11.15	21	13.16
28	12.69	27	11.56	29	11.18	28	13.35
DEC 06	12.29	MAR 06	11.40	JUN 05	11.39	SEP 04	13.53
12	12.45	13	10.39	12	10.81	11	13.83
19	12.22	20	10.08	20	11.30	17	13.90
26	12.37	27	9.80	26	11.45	25	13.80

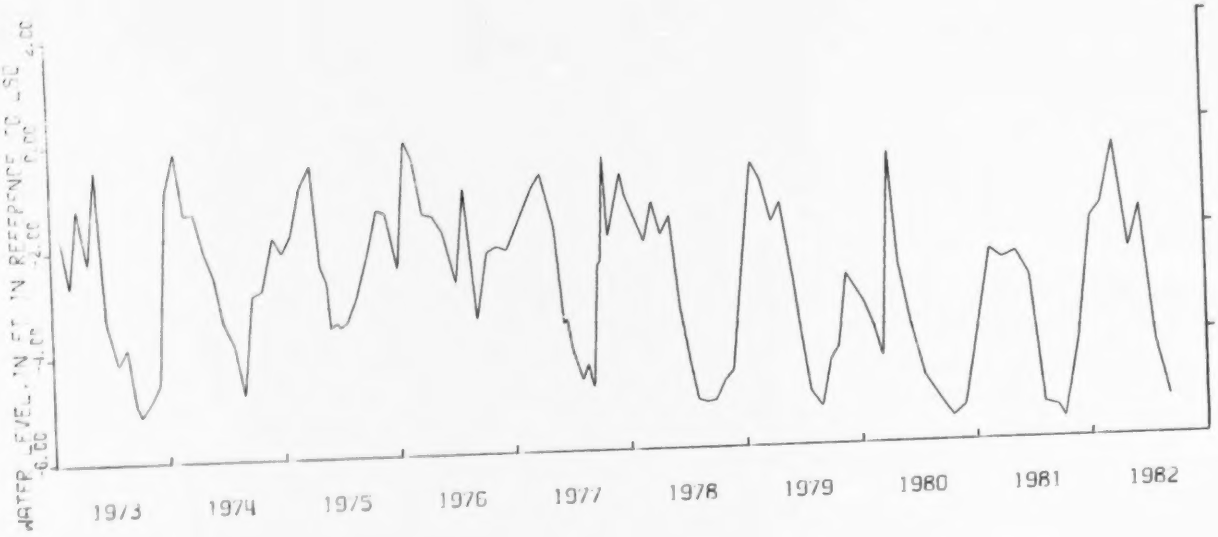


RENSSELAER COUNTY

423225073430501. Local number, Re 702.
LOCATION.--Lat 42°32'25", long 73°43'05", Hydrologic Unit 02020006, near Brookview.
Owner: Nicholas J. Bult.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 16 ft (4.9 m), cased to 13 ft (4.0 m), 1.5-in. (0.04-m) well point (60-gauze screen 13 ft or 4.0 m to 16 ft or 4.9 m).
DATUM.--Altitude of land-surface datum is 175 ft (53 m), from topographic map. Measuring point: Top of casing, 3.30 ft (1.006 m) above land-surface datum.
PERIOD OF RECORD.--November 1965 to current year. Records prior to October 1977 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.03 ft (0.01 m) above land-surface datum, November 29, 1972; lowest measured, 6.42 ft (1.96 m) below land-surface datum, September 22, 1970.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1981	5.64	FEB 08, 1982	1.61	MAY 03, 1982	2.46	JUL 21, 1982	4.19
NOV 19	4.21	MAR 23	0.45	JUN 10	1.67	SEP 02	5.28
JAN 05, 1982	1.86						

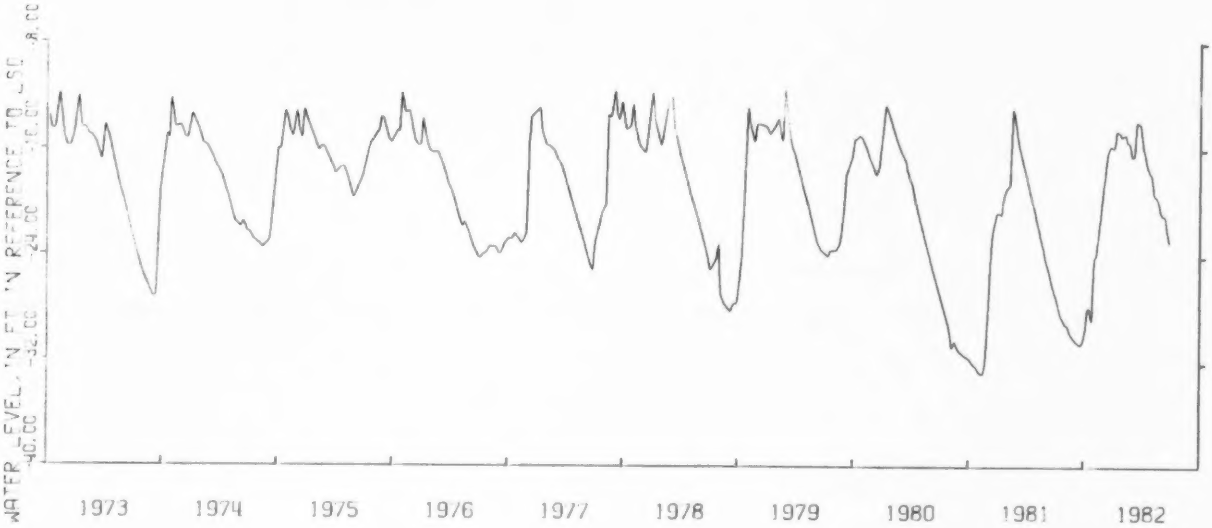


ROCKLAND COUNTY

411802073593001. Local number, Ro 18.
LOCATION.--Lat 41°18'02", long 73°59'30", Hydrologic Unit 02030101, in Bear Mountain State Park near Lemon Road and Seven Lakes Drive.
Owner: Palisades Interstate Park Commission.
AQUIFER.--Confined aquifer in Storm King Granite of Precambrian age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 60 ft (18.3 m), cased to 53 ft (16.2 m), open hole.
DATUM.--Altitude of land-surface datum is 390 ft (119 m), from topographic map. Measuring point: Top of extended casing, 3.65 ft (1.112 m) above land-surface datum.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 10.55 ft (3.22 m) below land-surface datum, Mar. 3, 1961; lowest measured 33.02 ft (10.06 m) below land-surface datum, Feb. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1981	27.25	DEC 31, 1981	29.82	APR 22, 1982	14.79	JUL 15, 1982	17.12
09	27.91	JAN 08, 1982	27.96	23	15.02	23	17.71
16	28.60	15	28.04	30	14.88	30	17.93
23	28.86	22	29.00	MAY 07	14.79	AUG 06	19.43
30	29.28	29	24.26	14	15.46	13	19.62
NOV 06	29.32	FEB 05	24.00	21	15.51	20	19.92
13	29.80	MAR 10	16.56	28	16.57	27	20.75
20	30.12	12	16.25	JUN 04	16.44	SEP 03	21.02
27	30.33	19	15.69	11	13.82	10	21.09
DEC 04	30.58	26	15.80	18	14.01	17	22.42
11	30.67	APR 02	15.86	25	14.12	24	23.03
18	30.81	09	14.51	JUL 02	15.84		
24	30.56	16	14.68	09	16.45		



ST. LAWRENCE COUNTY

444904074455201. Local number, St 40.

LOCATION.--Lat 44°49'04", long 74°45'52", Hydrologic Unit 04150306, near Brasher Falls.
Owner: New York State Department of Environmental Conservation.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in (0.91 m), depth 12 ft (3.7 m), concrete cased to 12 ft (3.7 m), open end.

DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Chisled mark on top edge of 6-in. (0.15-m) by 8-in. (0.20-m) opening of concrete well cover, 0.65 ft (0.198 m) above land-surface datum.

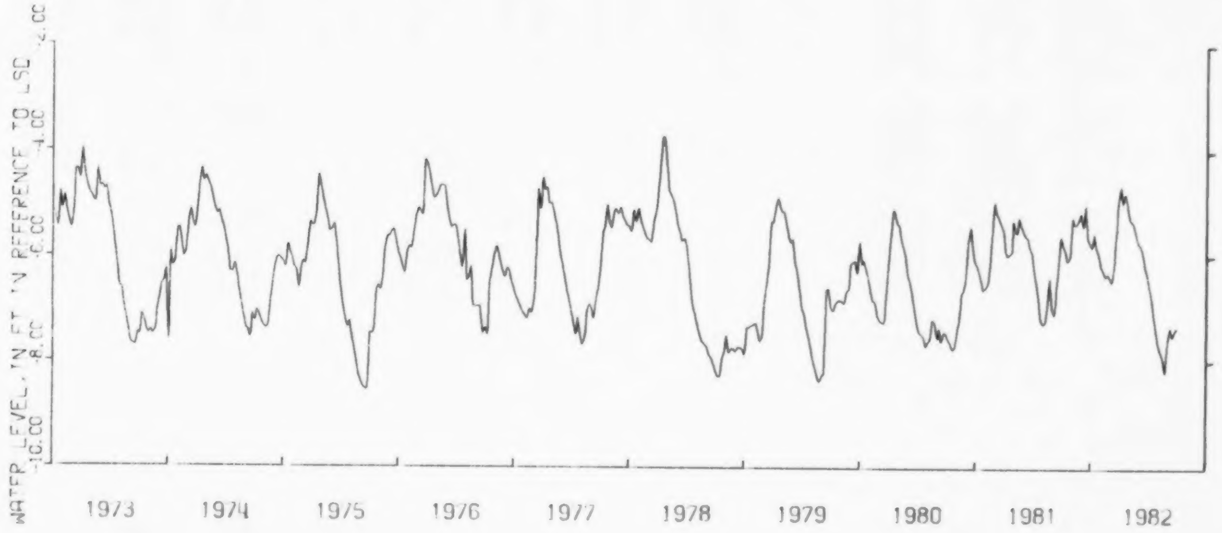
PERIOD OF RECORD.--May 1953 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 3.24 ft (0.99 m) below land-surface datum, Apr. 21, 1971; lowest measured 9.38 ft (2.86 m) below land-surface datum, Oct. 24, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 04, 1981	5.77	JAN 03, 1982	5.80	APR 04, 1982	4.63	JUL 04, 1982	6.60	E
10	5.86	09	5.53	10	4.96	11	6.80	E
18	6.07	16	5.79	17	4.78	17	7.15	
25	5.97	23	5.92	24	4.93	24	7.45	
NOV 01	5.23	30	6.16	MAY 02	5.28	31	7.66	
08	5.37	FEB 06	6.24	09	5.31	AUG 07	7.78	
14	5.36	14	6.35	16	5.39	14	7.89	
21	5.28	21	6.30	23	5.61	21	8.19	
28	5.14	27	6.38	30	5.73	29	7.59	
DEC 06	5.42	MAR 06	6.46	JUN 06	5.77	SEP 05	7.32	
13	5.00	13	6.18	12	5.91	12	7.51	
20	5.62	20	5.57	20	6.18	18	7.42	
26	5.71	27	4.95	27	6.35	26	7.33	

E Estimated.



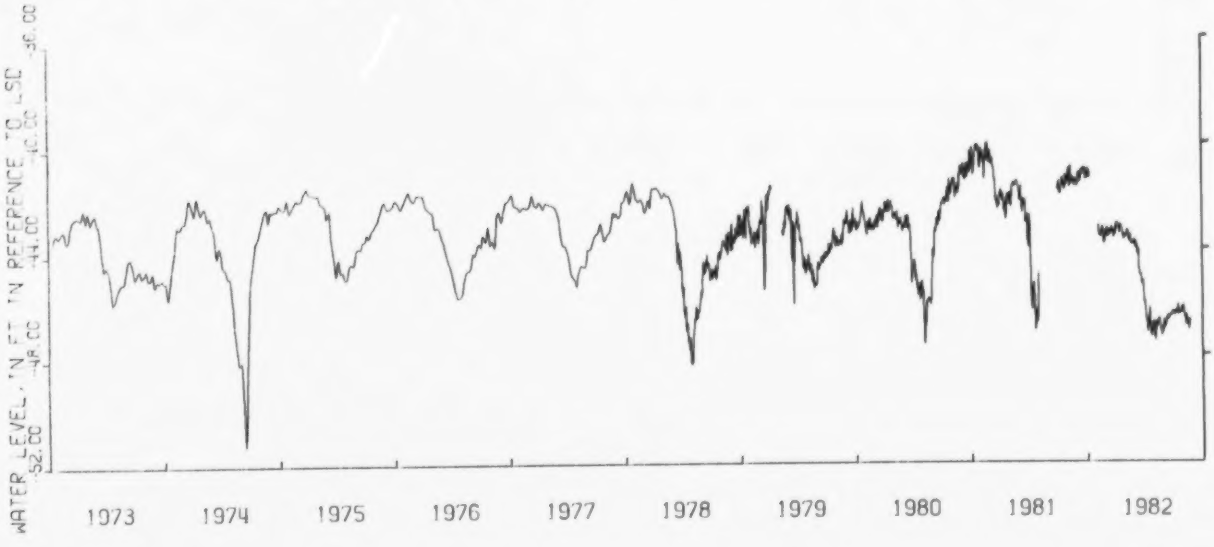
SARATOGA COUNTY

430327073475401. Local number, Sa 529.
LOCATION.--Lat 43°03'27", long 73°47'54", Hydrologic Unit 02020003, at Saratoga Springs.
Owner: Saratoga Springs Authority, New York State.
AQUIFER.--Confined aquifer in dolomite of Ordovician age.
WELL CHARACTERISTICS.--Drilled unused well, diameter 6 in. (0.15 m), depth 304 ft (92.6 m), cased to 189 ft (57.6 m), open hole.
DATUM.--Altitude of land-surface datum is 305 ft (93 m), from topographic map. Measuring point: Top of casing, 3.38 ft (1.028 m) above land-surface datum.
REMARKS.--Water level affected by earthquakes and distant pumping.
PERIOD OF RECORD.--May 1949 to November 1961, August 1964 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 39.70 ft (12.10 m) below land-surface datum, Jan. 7, 1981; lowest, 56.20 ft (17.13 m) below land-surface datum, July 29, 1949.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	41.36	41.42	41.05	---	43.48	43.19	43.45	43.64	45.84	46.68	46.90
2	---	41.17	41.41	41.26	---	43.22	43.43	43.43	43.58	46.03	46.77	46.65
3	---	41.18	41.58	41.31	---	43.38	43.15	43.41	43.76	45.89	46.84	46.62
4	---	41.15	41.51	40.88	---	43.38	43.00	43.50	43.92	45.95	47.04	46.82
5	---	41.13	41.39	40.95	---	43.22	43.19	43.52	43.83	46.19	47.24	46.94
6	---	40.84	41.16	41.11	---	43.40	42.95	43.49	43.66	46.31	47.44	46.90
7	41.36	40.96	41.09	41.14	---	43.13	42.98	43.38	43.75	46.39	47.21	46.93
8	41.60	41.30	41.04	41.24	---	43.32	43.02	43.30	43.73	46.46	46.93	46.91
9	41.80	41.47	41.07	40.97	43.04	43.49	42.97	43.23	43.80	46.64	46.79	46.83
10	41.86	41.58	41.04	40.98	43.16	43.50	43.06	43.24	44.07	46.73	46.69	46.68
11	41.85	41.43	41.21	41.03	43.36	43.29	43.06	43.26	44.14	46.73	46.69	46.60
12	41.81	41.56	41.43	---	43.47	43.32	43.12	43.24	44.05	46.77	46.92	46.58
13	41.74	40.78	41.43	---	43.31	43.21	43.05	43.32	43.92	46.98	46.76	46.48
14	41.63	41.49	41.32	---	43.33	43.20	43.12	43.52	43.97	47.10	46.66	46.44
15	41.45	41.28	41.07	---	43.29	43.41	43.34	43.61	44.73	46.79	46.60	46.47
16	41.29	41.21	40.93	---	43.34	43.45	43.37	43.59	44.67	46.57	46.65	46.58
17	41.37	41.24	41.15	---	43.46	43.22	43.13	43.65	44.77	46.35	46.58	46.66
18	41.23	41.25	41.10	---	43.48	43.38	43.03	43.63	44.91	46.16	46.58	46.51
19	41.23	41.44	41.06	---	43.23	43.34	43.13	43.49	44.88	46.35	46.61	46.59
20	41.50	41.35	41.11	---	43.12	43.33	43.05	43.39	44.95	46.61	46.64	46.55
21	41.59	41.22	41.15	---	43.09	43.12	43.10	43.60	44.99	46.85	46.89	46.52
22	41.65	41.36	41.01	---	43.21	43.09	43.18	43.74	45.03	46.97	46.96	46.50
23	41.53	41.47	40.87	---	43.30	43.27	43.18	43.79	44.88	47.15	46.96	46.39
24	41.61	41.51	41.08	---	43.37	43.34	43.18	43.69	45.18	47.22	47.04	46.45
25	41.71	41.56	41.07	---	43.60	43.35	43.24	43.60	45.27	47.12	46.96	46.49
26	41.50	41.51	41.04	---	43.76	43.20	43.34	43.64	45.29	47.22	47.25	46.50
27	41.21	41.29	40.90	---	43.71	43.34	43.38	43.67	45.32	47.28	47.21	46.28
28	41.12	41.32	40.91	---	43.67	43.52	43.58	43.76	45.22	46.75	47.21	46.33
29	41.39	41.34	40.94	---	---	43.52	43.60	43.69	45.12	46.74	47.16	46.44
30	41.49	41.37	41.26	---	---	43.43	43.54	43.61	45.39	46.95	47.15	46.42
31	41.53	---	41.32	---	---	43.17	---	43.62	---	46.83	47.03	---

WTR YEAR 1982 HIGHEST 40.63 Jan. 4, 5, 1982 LOWEST 47.56 Aug. 6, 1982



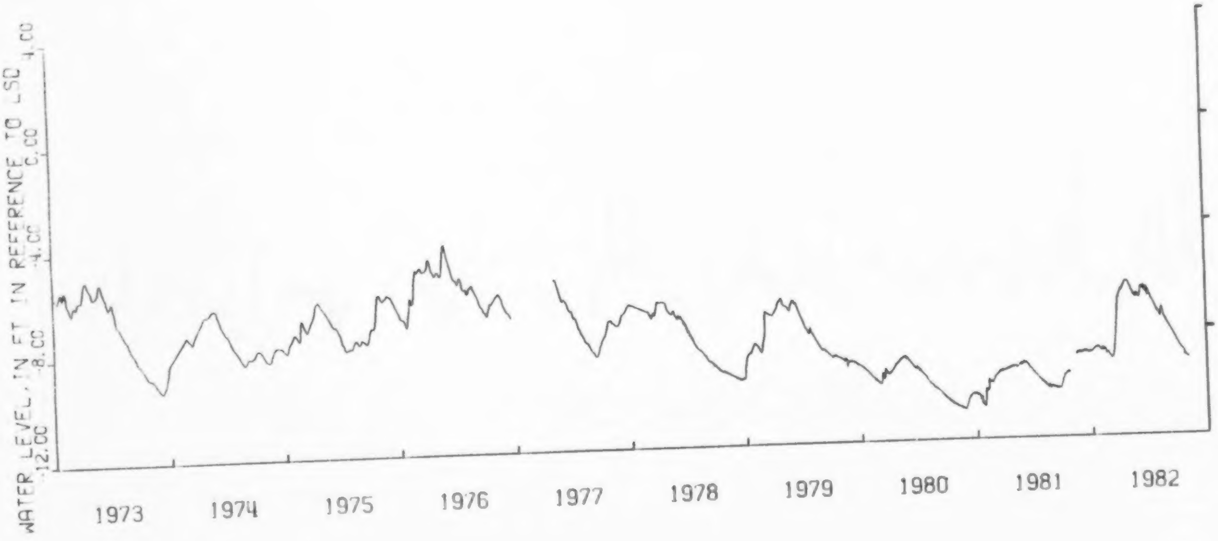
SARATOGA COUNTY

430013073370401. Local number, Sa 1072.
LOCATION.--Lat 43°00'13", long 73°37'04", Hydrologic Unit 02020003, Saratoga National Historical Park near Stillwater.
Owner: U.S. National Park Service.
AQUIFER.--Water-table aquifer in sand of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 24 ft (7.3 m), cased to 21 ft (6.4 m), 2-in. (0.05-m) well point (30-gauze screen 21 ft or 6.4 m to 24 ft or 7.3 m).
DATUM.--Altitude of land-surface datum is 224 ft (68 m), from topographic map. Measuring point: Top of casing, 3.31 ft (1.007 m) above land-surface datum.
REMARKS.--Water level affected by adjacent well pumping.
PERIOD OF RECORD.--July 1969 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.94 ft (1.20 m) below land-surface datum, May 25, 1976; lowest, 11.91 ft (3.63 m) below land-surface datum, Oct. 8, 1965.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.93	---	8.82	8.85	8.77	---	6.67	6.25	6.82	6.52	7.40	7.87
2	9.87	---	8.88	8.81	8.77	---	6.65	6.27	6.77	6.62	7.36	7.83
3	9.78	---	8.85	8.80	8.80	9.02	6.60	6.30	6.76	6.57	7.44	7.92
4	9.83	---	8.81	8.86	8.76	9.03	6.56	6.34	6.84	6.67	7.40	7.89
5	9.78	---	8.80	8.79	8.71	9.02	6.54	6.38	6.82	6.68	7.47	7.97
6	9.76	---	8.85	8.77	8.67	9.07	6.50	6.43	6.67	6.76	7.45	7.94
7	9.67	---	8.80	8.80	8.66	9.10	6.48	6.43	6.59	6.76	7.54	8.02
8	9.70	---	8.85	8.74	8.66	9.06	6.58	6.46	6.50	6.78	7.51	7.98
9	9.66	---	8.80	8.78	8.79	9.05	6.55	6.48	6.42	6.77	7.59	8.02
10	9.67	---	8.78	8.71	8.83	9.06	6.51	6.51	6.40	6.80	7.32	8.05
11	9.68	---	8.83	8.74	8.73	9.05	6.52	6.56	6.45	6.90	7.26	8.08
12	9.66	---	8.80	8.70	8.73	9.05	6.42	6.58	6.42	6.92	7.19	8.07
13	9.63	---	8.79	8.68	8.72	8.94	6.47	6.60	6.49	6.90	7.28	8.14
14	9.62	8.93	8.85	8.72	8.73	8.79	6.40	6.60	6.43	6.95	7.26	8.11
15	9.63	8.86	8.79	8.66	8.73	8.65	6.35	6.68	6.47	6.97	7.37	8.17
16	9.61	8.91	8.84	8.70	8.74	8.65	6.36	6.65	6.41	6.98	7.39	8.15
17	9.55	8.84	8.81	8.65	8.90	8.63	6.34	6.74	6.45	7.01	7.45	8.17
18	9.62	8.83	8.79	8.64	8.92	8.31	6.30	6.70	6.37	7.05	7.45	8.27
19	9.59	8.87	8.85	8.66	8.89	8.17	6.27	6.77	6.41	7.05	7.57	8.25
20	9.55	8.82	8.81	8.71	8.89	8.05	6.23	6.74	6.58	7.08	7.54	8.33
21	9.59	8.87	8.81	8.71	8.90	7.89	6.24	6.73	6.55	7.08	7.62	8.29
22	9.63	8.83	8.89	8.66	8.85	7.79	6.22	6.83	6.51	7.16	7.58	8.31
23	---	8.82	8.86	8.69	8.85	7.62	6.22	6.79	6.64	7.13	7.67	8.37
24	---	8.86	8.83	8.63	---	7.44	6.21	6.82	6.53	7.23	7.64	8.35
25	---	8.82	8.82	8.65	---	7.24	6.23	6.71	6.43	7.21	7.66	8.37
26	---	8.86	8.86	8.71	---	6.94	6.22	6.65	6.44	7.28	7.74	8.46
27	---	8.85	8.80	8.69	---	6.81	6.22	6.70	6.45	7.27	7.69	8.42
28	---	8.81	8.86	8.72	---	6.78	6.20	6.70	6.60	7.33	7.79	8.50
29	---	8.80	8.81	8.70	---	6.81	6.23	6.77	6.79	7.30	7.75	8.46
30	---	8.86	8.81	8.76	---	6.76	6.24	6.71	6.65	7.38	7.85	8.56
31	---	---	8.85	8.72	---	6.77	---	6.74	---	7.35	7.80	---

WTR YEAR 1982 HIGHEST 6.17 Apr. 27, 1982 LOWEST 10.03 Oct. 1, 1981



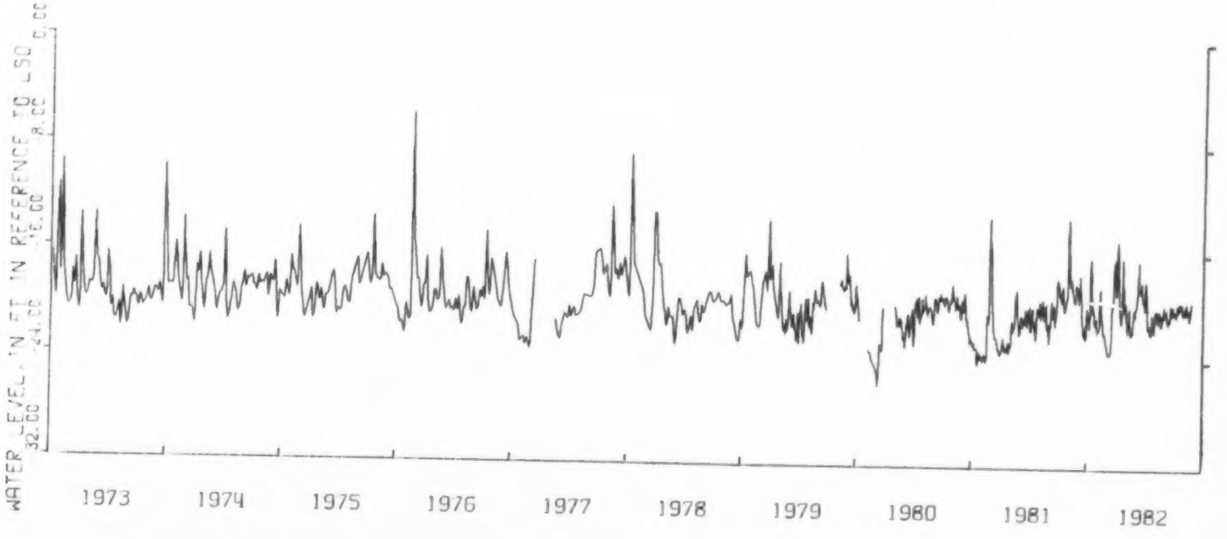
SCHENECTADY COUNTY

424910073591401. Local number, Sn 363.
LOCATION.--Lat 42°49'10", long 73°59'14", Hydrologic Unit 02020004, in Schenectady.
Owner: City of Schenectady.
AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.
WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 54 ft (16.4 m), filled in from original depth of 57 ft (17.4 m), cased to 57 ft (17.4 m), open end.
DATUM.--Land-surface datum is 228.50 ft (69.647 m) National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 2.47 ft (0.753 m) above land-surface datum.
REMARKS.--Water level affected by stage of Mohawk River, and by pumping (average 16.1 Mgal/d or 60,900 m³/d in 1982) from adjacent municipal well field.
PERIOD OF RECORD.--June 1960 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.62 ft (1.10 m) below land-surface datum, Dec. 27, 1973; lowest, 31.27 ft (9.53 m) below land-surface datum, Feb. 10, 1966.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.89	16.26	19.30	21.02	21.53	22.87	16.10	20.71	19.80	17.83	20.02	20.54
2	19.07	17.04	19.58	20.93	21.35	23.05	14.78	20.72	19.59	18.37	20.48	19.97
3	19.04	17.84	18.67	21.24	21.60	23.13	15.66	20.98	19.38	18.87	20.05	20.10
4	18.95	18.01	17.85	21.42	21.06	23.40	15.49	21.36	19.14	18.73	20.13	19.93
5	18.98	18.23	17.43	19.58	19.66	23.45	15.88	21.81	19.25	19.18	19.97	19.99
6	19.15	18.37	18.07	16.59	18.69	23.37	16.97	21.76	18.47	20.39	20.36	20.03
7	19.53	17.90	18.38	16.14	18.40	23.18	18.07	21.03	16.33	21.07	20.81	20.63
8	18.66	17.66	18.70	16.15	19.10	23.26	19.01	20.72	16.55	21.35	20.98	20.82
9	18.60	17.96	19.64	16.83	19.53	23.43	19.52	20.13	17.41	21.45	20.26	20.91
10	18.22	18.18	20.31	17.38	20.02	23.28	19.99	19.85	18.17	21.27	20.59	21.10
11	18.28	18.45	20.81	18.65	20.42	23.24	20.26	20.66	18.40	21.14	20.45	21.07
12	18.60	18.64	21.06	19.52	20.77	23.40	20.26	21.37	18.57	21.06	20.05	20.86
13	18.88	18.89	21.04	19.84	20.84	22.88	20.74	21.17	18.49	21.47	20.20	20.57
14	19.54	18.96	21.49	20.22	21.12	21.85	21.09	21.33	18.65	21.71	20.07	20.74
15	20.10	18.91	21.74	20.24	21.26	20.45	21.05	21.65	18.78	21.83	20.07	20.85
16	19.97	19.10	21.89	19.89	21.56	19.64	20.73	21.93	18.75	21.64	20.64	20.57
17	20.22	19.41	21.96	20.06	21.96	19.76	20.19	21.88	18.51	21.92	21.06	20.32
18	20.23	19.48	22.01	20.46	21.87	19.64	18.17	21.81	17.91	21.74	21.20	20.11
19	19.75	19.51	22.05	20.87	21.92	19.82	16.11	21.78	18.07	21.53	21.25	19.55
20	19.75	19.56	21.93	20.99	21.82	19.32	17.47	21.51	18.33	21.32	21.09	20.10
21	19.36	18.62	21.15	21.18	21.80	18.82	18.21	21.26	18.96	20.26	20.36	20.18
22	19.46	18.23	22.21	21.10	22.00	17.38	18.15	20.86	19.40	20.48	20.31	20.42
23	19.28	18.11	22.28	20.71	22.21	16.40	18.62	20.54	19.22	20.85	20.66	20.13
24	19.17	18.27	21.97	20.93	22.45	17.28	19.18	20.41	19.31	20.92	20.78	20.21
25	18.92	18.39	20.55	21.31	22.39	17.60	19.66	19.91	19.33	20.98	20.62	19.77
26	18.55	18.68	20.22	20.61	22.67	16.99	20.17	20.02	19.26	21.25	20.04	19.65
27	18.02	18.39	19.85	21.51	22.72	16.14	19.90	20.50	19.72	21.76	20.10	20.02
28	15.00	18.30	20.02	21.79	22.70	17.06	19.67	20.49	19.92	21.62	19.64	20.00
29	13.17	18.46	20.28	21.66	---	18.26	19.49	20.09	20.05	20.36	19.97	20.31
30	14.26	19.05	20.70	21.42	---	18.95	20.10	19.83	18.06	20.15	19.94	20.04
31	15.43	---	21.03	21.37	---	18.96	---	19.78	---	20.37	20.44	---

WTR YEAR 1982 HIGHEST 12.75 Oct. 29, 1981 LOWEST 23.64 Mar. 5, 1982



ULSTER COUNTY

414425074213601. Local number, U 204.

LOCATION.--Lat 41°44'25", long 74°21'36", Hydrologic Unit 02020007, near Napanoch.
Owner: New York State Department of Correction.

AQUIFER.--Water-table aquifer in deposits of Pleistocene age.

WELL CHARACTERISTICS.--Drilled unused well, diameter 8 in. (0.20 m), depth 46 ft (14.0 m), cased to unknown depth, filled in from original depth of 67 ft (20.4 m).

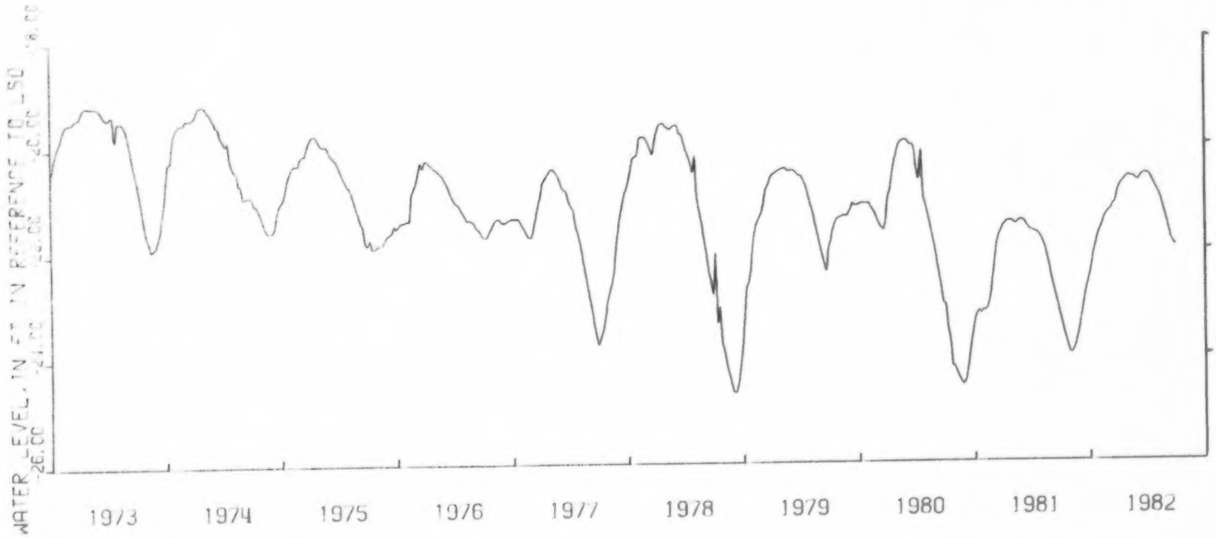
DATUM.--Altitude of land-surface datum is 300 ft (91 m), from topographic map. Measuring point: Top of casing, 1.00 ft (0.305 m) above land-surface datum.

PERIOD OF RECORD.--October 1954 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.84 ft (5.13 m) below land-surface datum, Mar. 24, 1955; lowest measured, 26.90 ft (8.20 m) below land-surface datum, Dec. 29, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1981	23.44	JAN 05, 1982	22.30	APR 20, 1982	20.70	JUL 20, 1982	20.74
13	23.62	12	22.06	27	20.65	AUG 03	20.92
20	23.80	19	21.92	MAY 04	20.61	10	20.99
27	23.96	26	21.75	11	20.66	17	21.10
NOV 03	23.97	FEB 09	21.53	18	20.65	24	21.27
10	23.89	16	21.40	28	20.71	SEP 01	21.45
17	23.77	MAR 02	21.28	JUN 01	20.73	07	21.62
24	23.57	09	21.24	08	20.69	14	21.84
DEC 01	23.35	16	21.14	15	20.61	21	21.90
08	23.10	23	21.13	22	20.58	28	21.96
17	22.82	30	20.92	29	20.58		
22	22.70	APR 06	20.81	JUL 06	20.61		
29	22.50	13	20.74	13	20.65		



ULSTER COUNTY

414948074035101. Local number, U 405.

LOCATION.--Lat 41°49'48", long 74°03'51", Hydrologic Unit 02020007, Grist Mill Road, Tillson.
Owner: City School District of Kingston.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Bored observation well, diameter 2.5 in. (0.06 m), depth 36 ft (11.0 m), cased to 34 ft (10.4 m), 2-in. (0.05-m) well point (60-gauze screen 34 ft or 10.4 m to 36 ft or 11.0 m).

DATUM.--Altitude of land-surface datum is 240 ft (73 m), from topographic map. Measuring point: Top of casing, 0.47 ft (0.143 m) above land-surface datum.

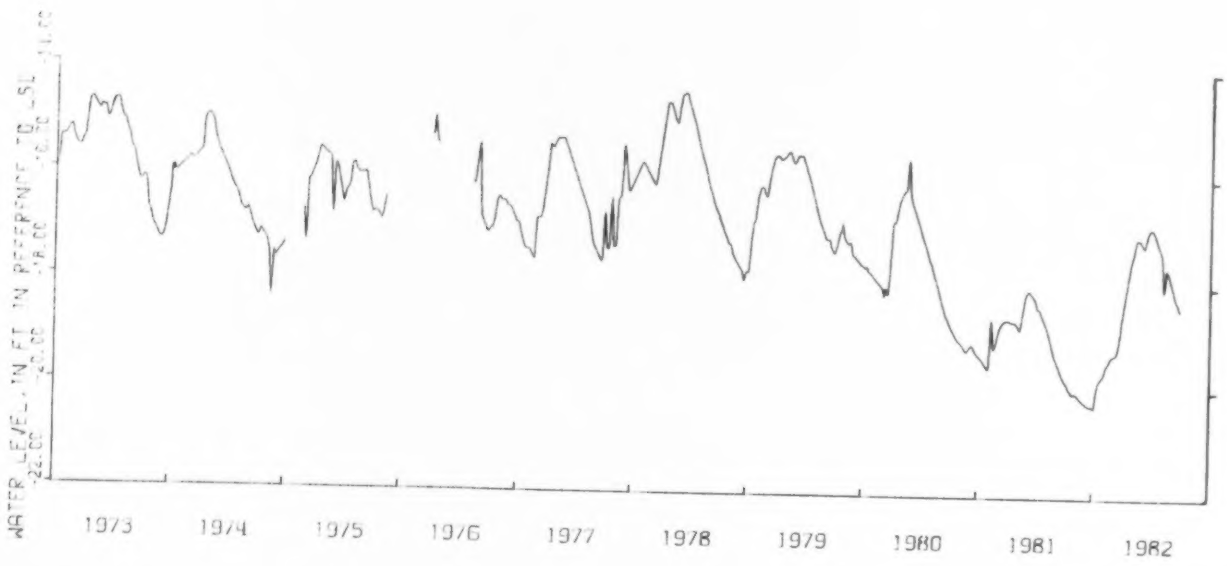
REMARKS.--Originally a dug well, diameter 36 in. (0.91 m), depth 21 ft (6.4 m), stone-lined. Well deepened by power auger, October 1965.

PERIOD OF RECORD.--October 1964 to July 1965, March 1966 to December 1974, April 1976 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.43 ft (4.40 m) below land-surface datum, June 3, 1978; lowest measured, 20.71 ft (6.31 m) below land-surface datum, Jan. 24, 1967.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1981	19.82	JAN 02, 1982	20.30	APR 17, 1982	17.80	JUL 17, 1982	17.18
10	19.89	09	19.94	24	17.53	24	17.28
13	19.95	16	19.79	MAY 01	17.39	31	17.40
17	19.96	23	19.72	08	17.13	AUG 07	18.08
24	20.05	30	19.68	10	17.08	14	17.64
31	20.02	FEB 06	19.50	15	17.08	21	17.75
NOV 07	20.04	13	19.46	22	17.11	28	17.89
14	20.10	20	19.35	29	17.18	SEP 04	18.03
21	20.14	27	19.30	JUN 05	17.25	11	18.18
23	20.15	MAR 06	19.29	12	17.01	13	18.24
28	20.18	13	19.25	19	16.90	18	18.27
DEC 05	20.21	20	19.00	21	16.89	25	18.43
12	20.25	27	18.65	26	16.88		
19	20.27	APR 03	18.34	JUL 03	16.92		
26	20.26	10	18.07	10	17.03		

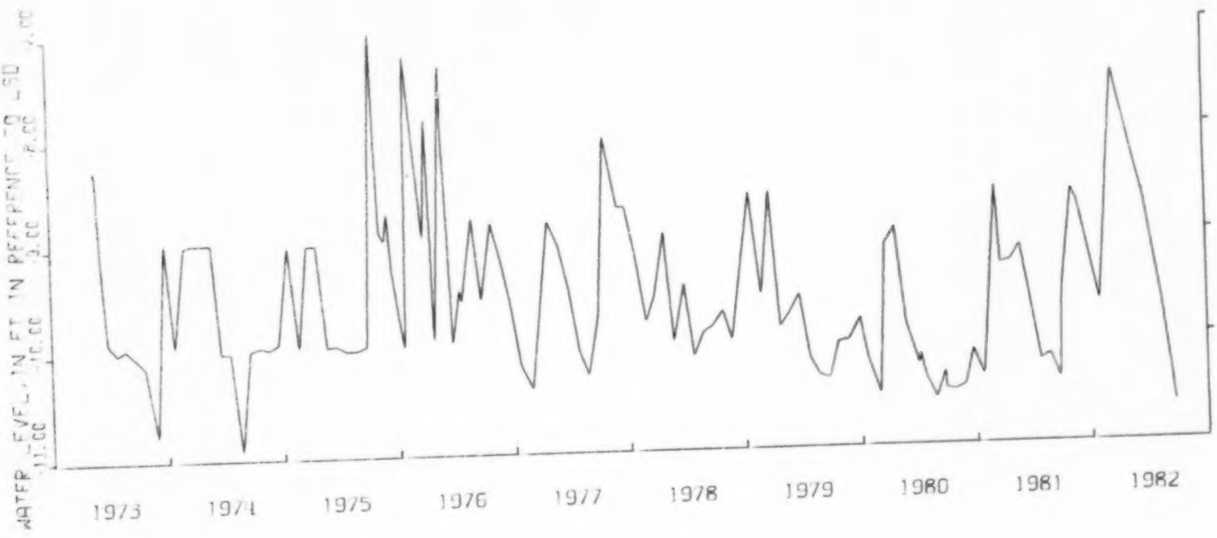


WASHINGTON COUNTY

431026073194101. Local number, W 264.
LOCATION.--Lat 43°10'26", long 73°19'41", Hydrologic Unit 02020003, in Salem.
Owner: Village of Salem.
AQUIFER.--Water-table aquifer in gravel of Pleistocene age.
WELL CHARACTERISTICS.--Dug fire-protection well, approximate size 8 ft (2.4 m) by 12 ft (3.7 m), depth 14 ft (4.3 m), filled in from original depth of 15 ft (4.6 m), stone-lined.
DATUM.--Land-surface datum is 485.5 ft (147.98 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of concrete cover at east side of square opening, 0.30 ft (0.091 m) above land-surface datum.
REMARKS.--Water level affected by stage of nearby stream.
PERIOD OF RECORD.--July 1946 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 6.62 ft (2.02 m) below land-surface datum, Apr. 4, 1960; lowest measured 11.70 ft (3.57 m) below land-surface datum, Oct. 12, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06, 1981	8.63	JAN 28, 1982	9.68	JUN 23, 1982	8.73	SEP 21, 1982	10.65
24	8.74	MAR 23	7.50	AUG 10	9.65		



GROUND-WATER LEVELS

WASHINGTON COUNTY

431030073192101. Local number, W 533.

LOCATION.--Lat 43°10'30", long 73°19'21", Hydrologic Unit 02020003, in Salem.
Owner: Salem Central High School.

AQUIFER.--Water-table aquifer in sand and gravel of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in. (0.15 m), depth 15 ft (4.6 m), cased to 16 ft (4.9 m), open end. Well backfilled 1.6 ft (0.48 m) with coarse gravel.

DATUM.--Altitude of land-surface datum is 490 ft (149 m), from topographic map. Measuring point: Top of casing, 3.10 ft (0.945 m) above land-surface datum.

REMARKS.--Well was drilled March 1974 as a replacement for 431032073192401 (local number W 532), located 350 ft (107 m) northwest, which has a period of record from October 1965 to June 1973 (unpublished).

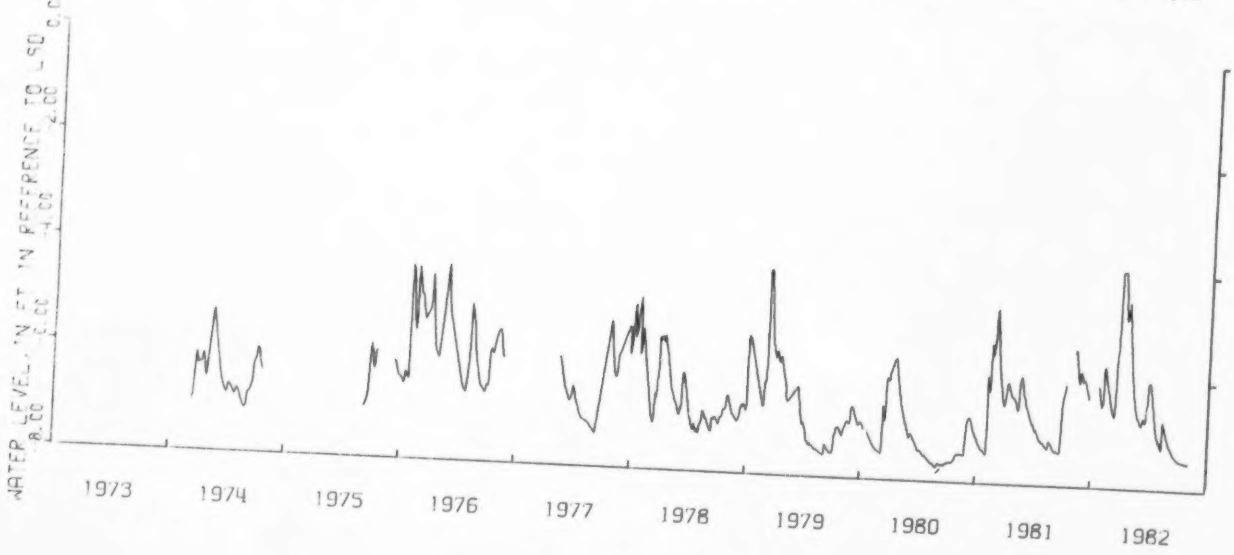
PERIOD OF RECORD.--March 1974 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.93 ft (1.20 m) below land-surface datum, Mar. 25, 26-29, Apr. 1-2, 3, 4, 5, 1982; lowest recorded, 7.75 ft (2.36 m) below land-surface datum, Aug. 26, 27-29, 30, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.34	---	6.05	---	6.47	6.49	3.93	5.60	6.81	6.01	7.12	7.18
2	6.34	---	6.02	---	6.42	6.51	3.93	5.68	6.81	6.04	7.15	7.20
3	6.32	---	6.00	---	6.36	6.54	3.94	5.76	6.81	6.07	7.17	7.21
4	6.26	---	6.00	---	6.04	6.57	3.93	5.83	6.83	6.11	7.19	7.20
5	6.24	---	6.00	---	5.82	6.60	3.93	5.90	6.83	6.16	7.21	7.21
6	6.22	---	6.00	---	5.74	6.61	3.98	5.97	6.78	6.22	7.22	7.23
7	6.17	5.43	6.01	---	5.73	6.62	4.21	6.03	6.71	6.27	7.24	7.24
8	6.13	5.49	6.03	---	5.76	6.63	4.41	6.09	6.69	6.32	7.26	7.26
9	6.09	5.55	6.06	---	5.78	6.65	4.57	6.15	6.68	6.37	7.26	7.27
10	---	5.60	6.08	---	5.82	6.67	4.73	6.20	6.68	6.42	6.76	7.29
11	---	5.65	6.10	---	5.88	6.67	4.83	6.26	6.69	6.48	6.73	7.30
12	---	5.72	6.13	---	5.93	6.58	4.85	6.31	6.71	6.52	6.76	7.31
13	---	5.78	6.16	---	5.96	6.37	4.79	6.36	6.73	6.57	6.79	7.32
14	---	5.82	6.18	---	6.01	6.00	4.65	6.41	6.74	6.62	6.81	7.34
15	---	5.87	6.20	---	6.05	5.71	4.67	6.45	6.75	6.66	6.83	7.35
16	---	5.92	6.22	---	6.08	5.56	4.76	6.49	6.77	6.71	6.86	7.35
17	---	5.97	6.25	---	6.09	5.50	4.80	6.53	6.69	6.76	6.88	7.36
18	---	6.01	6.27	---	6.13	5.47	4.62	6.57	6.56	6.81	6.90	7.37
19	---	6.04	6.30	---	6.16	5.37	4.50	6.60	6.51	6.86	6.92	7.38
20	---	6.07	6.33	---	6.19	5.21	4.58	6.62	6.48	6.90	6.94	7.39
21	---	6.02	6.37	6.10	6.22	4.96	4.70	6.65	6.45	6.94	6.96	7.39
22	---	5.92	---	6.15	6.26	4.67	4.80	6.68	6.39	6.96	6.99	7.40
23	---	5.86	---	6.19	6.29	4.32	4.89	6.70	6.27	7.00	7.01	7.40
24	---	5.85	---	6.24	6.33	4.04	5.00	6.69	6.11	7.02	7.03	7.41
25	---	5.86	---	6.29	6.37	3.94	5.11	6.67	6.04	7.04	7.05	7.41
26	---	5.89	---	6.34	6.40	3.93	5.21	6.69	6.01	7.06	7.07	7.42
27	---	5.91	---	6.38	6.43	3.93	5.29	6.72	6.01	7.08	7.09	7.43
28	---	5.94	---	6.40	6.46	3.93	5.37	6.74	6.02	7.10	7.11	7.44
29	---	5.98	---	6.44	---	3.93	5.44	6.76	6.05	7.12	7.13	7.44
30	---	6.01	---	6.47	---	3.94	5.52	6.78	6.00	7.13	7.15	7.45
31	---	---	---	6.50	---	3.97	---	6.79	---	7.14	7.17	---

WTR YEAR 1982 HIGHEST 3.93 Mar. 25, 26-29, Apr. 1-2, 3, 4, 5, 1982 LOWEST 7.45 Sept. 29, 30, 1982



411421073481201. Local number, We 3.

LOCATION.--Lat 41°14'21", long 73°48'12", Hydrologic Unit 02030101, near Yorktown Heights.
Owner: New York City Board of Water Supply.

AQUIFER.--Water-table aquifer in sand of Pleistocene age.

WELL CHARACTERISTICS.--Dug unused well, diameter 36 in. (0.91 m), depth cleaned out to 17.6 ft (5.36 m) November 9, 1981, original depth reported to be 18.2 ft (5.55 m), filled in to 17.1 ft (5.21 m) as of November 1956, to 16.3 ft (4.97 m) as of June 1971, to 15.5 ft (4.72 m) as of October 1977, to 15.3 ft (4.66 m) as of November 1978, cleaned out to 16.1 ft (4.91 m) September 23, 1981, stone lined.

DATUM.--Altitude of land-surface datum is 252.5 ft (76.96 m) National Geodetic Vertical Datum of 1929. Measuring point: Top edge of hole in wooden well cover, 1.13 ft (0.34 m) above land-surface datum.

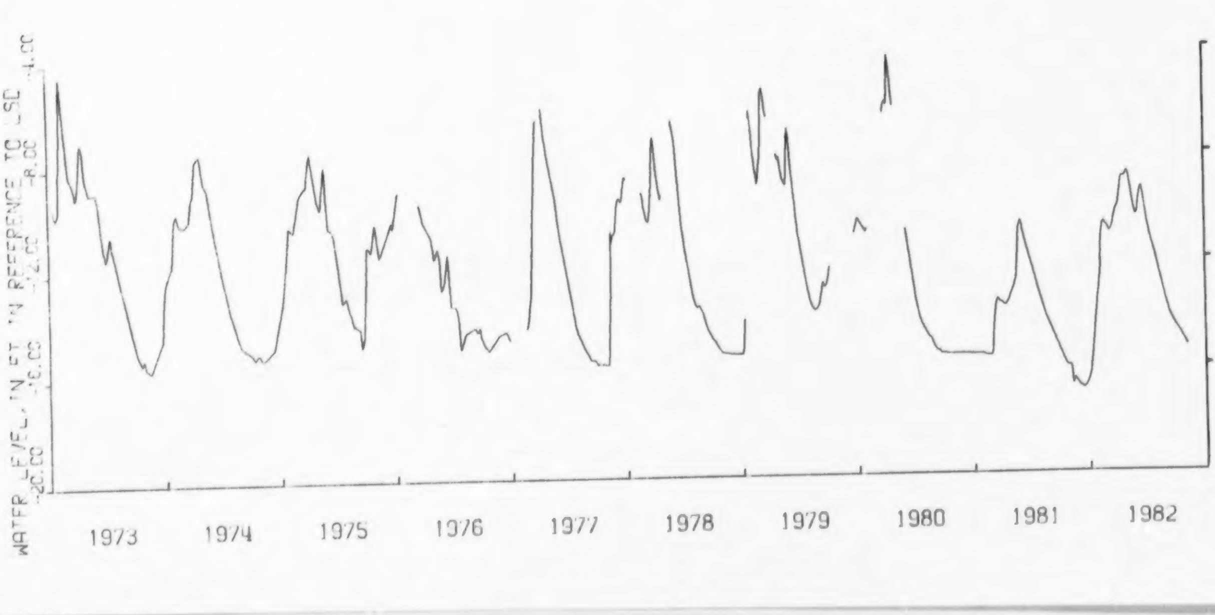
PERIOD OF RECORD.--April 1934 to September 1937, April 1938 to September 1945, March 1951 to current year. Records prior to October 1976 are unpublished and available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.9 ft (1.19 m) below land-surface datum, Apr. 12, 13, 1958; lowest measured, dry Nov. 30, 1935, Jan. 7, 1936, Feb. 1, 1936, Jan. 6 to Feb. 4, 1965, Nov. 12, 1970, Sept. 10 to Nov. 9, 1977, Oct. 30 to Nov. 7, 1978, Nov. 28, 1978 to Jan. 8, 1979, Sept. 6 to 30, 1980, Oct. 1, 1980 to Mar. 3, 1981, Oct. 25 to Nov. 8, 1981.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.41	DRY	16.76	16.48	12.83	10.74	10.05	8.83	10.35	10.14	11.96	13.65
2	15.44	DRY	16.77	16.44	12.87	10.72	10.05	8.76	10.37	10.24	12.02	13.69
3	15.47	DRY	16.78	16.41	12.79	10.78	10.00	8.72	10.39	10.32	12.07	13.73
4	15.50	DRY	16.78	16.33	12.75	10.80	9.96	8.69	10.36	10.41	12.13	13.78
5	15.53	DRY	16.79	16.25	12.60	10.81	9.97	8.66	10.28	10.49	12.19	13.83
6	15.55	DRY	16.80	16.11	12.22	10.85	9.88	8.63	10.22	10.56	12.26	13.88
7	15.58	DRY	16.80	15.91	11.89	10.83	9.83	8.64	10.15	10.62	12.33	13.93
8	15.61	DRY	16.81	15.59	11.53	10.90	9.75	8.65	10.04	10.67	12.39	13.97
9	15.65	---	16.82	15.18	11.24	10.92	9.63	8.69	9.90	10.74	12.44	14.01
10	15.69	16.68	16.83	---	11.07	10.94	9.53	8.78	9.77	10.81	12.50	14.04
11	15.71	16.49	16.84	---	10.96	10.90	9.40	8.86	9.67	10.90	12.56	14.07
12	15.74	16.46	16.84	---	10.85	10.88	9.29	8.94	9.58	---	12.62	14.12
13	15.77	16.47	16.85	---	10.75	10.87	9.12	9.03	9.51	---	12.67	14.15
14	15.80	16.47	16.86	---	10.70	10.86	9.02	9.11	9.45	11.10	12.72	14.17
15	15.81	16.48	16.86	---	10.65	10.87	8.97	9.19	9.38	11.15	12.77	14.20
16	15.82	16.50	16.85	---	10.60	10.81	8.96	9.27	9.32	11.20	12.83	14.22
17	15.84	16.51	16.86	---	10.60	10.74	8.94	9.36	9.27	11.24	12.88	14.25
18	15.85	16.53	16.83	---	10.60	10.72	8.89	9.45	9.25	11.29	12.93	14.27
19	15.87	16.55	16.81	---	10.57	10.65	8.87	9.52	9.23	11.33	12.99	14.30
20	15.95	16.56	16.79	---	10.56	10.59	8.84	9.59	9.23	11.37	13.05	14.33
21	15.97	16.58	16.77	---	10.56	10.52	8.83	9.68	9.23	11.41	13.11	14.36
22	15.98	16.60	16.75	---	10.59	10.47	8.83	9.77	9.27	11.45	13.19	14.38
23	15.98	16.62	16.72	---	10.62	10.44	8.82	9.85	9.34	11.49	13.24	14.40
24	15.99	16.63	16.70	---	10.64	10.39	8.84	9.91	9.43	11.53	13.28	14.42
25	DRY	16.65	16.68	---	10.68	10.33	8.87	9.98	9.52	11.58	13.32	14.44
26	DRY	16.66	16.65	12.75	10.73	10.27	8.90	10.04	9.62	11.62	13.37	14.46
27	DRY	16.68	16.62	12.78	10.73	10.25	8.91	10.11	9.73	11.67	13.41	14.47
28	DRY	16.70	16.59	12.78	10.74	10.23	8.97	10.17	9.83	11.73	13.47	14.50
29	DRY	16.72	16.57	12.81	---	10.20	8.97	10.22	9.92	11.79	13.52	14.52
30	DRY	16.74	16.55	12.82	---	10.15	8.91	10.27	10.03	11.85	13.56	14.54
31	DRY	---	16.53	12.82	---	10.09	---	10.32	---	11.90	13.60	---

WTR YEAR 1982 HIGHEST 8.62 May 6, 1982 LOWEST DRY Oct. 25-Nov. 8, 1981; (then cleaned out to 17.6)
17.39 Nov. 9, 1981



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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54\text{x}10^{1}$	millimeters (mm)
	$2.54\text{x}10^{-2}$	meters (m)
feet (ft)	$3.048\text{x}10^{-1}$	meters (m)
miles (mi)	$1.609\text{x}10^{0}$	kilometers (km)
	Area	
acres	$4.047\text{x}10^{3}$	square meters (m^2)
	$4.047\text{x}10^{-1}$	square hectometers (hm^2)
	$4.047\text{x}10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590\text{x}10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785\text{x}10^{0}$	liters (L)
	$3.785\text{x}10^{0}$	cubic decimeters (dm^3)
	$3.785\text{x}10^{-3}$	cubic meters (m^3)
million gallons	$3.785\text{x}10^{3}$	cubic meters (m^3)
	$3.785\text{x}10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832\text{x}10^{1}$	cubic decimeters (dm^3)
	$2.832\text{x}10^{-2}$	cubic meters (m^3)
cfs-days	$2.447\text{x}10^{3}$	cubic meters (m^3)
	$2.447\text{x}10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233\text{x}10^{3}$	cubic meters (m^3)
	$1.233\text{x}10^{-3}$	cubic hectometers (hm^3)
	$1.233\text{x}10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832\text{x}10^{1}$	liters per second (L/s)
	$2.832\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832\text{x}10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309\text{x}10^{-2}$	liters per second (L/s)
	$6.309\text{x}10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309\text{x}10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381\text{x}10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381\text{x}10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072\text{x}10^{-1}$	megagrams (Mg) or metric tons